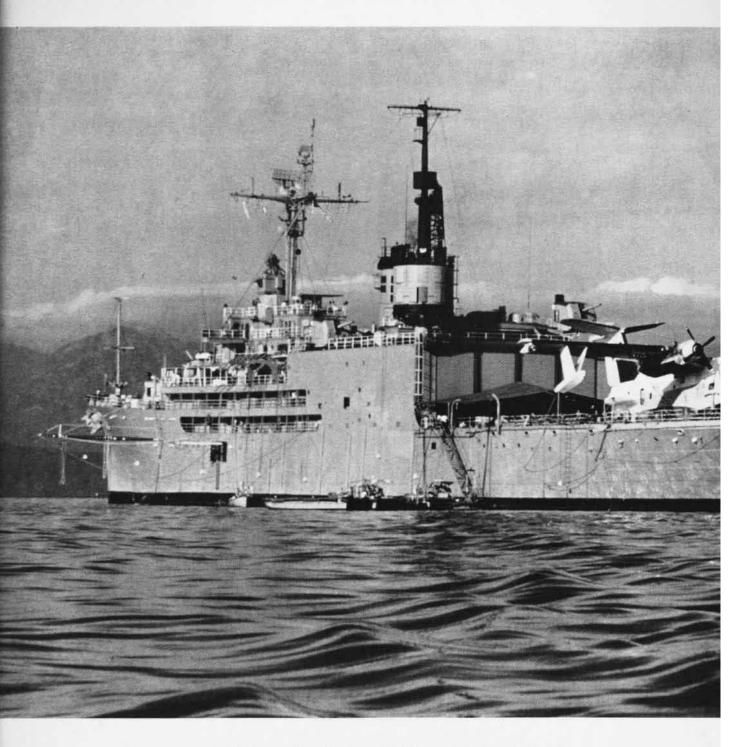
NAVAL AVIATION

48th Year of Publication

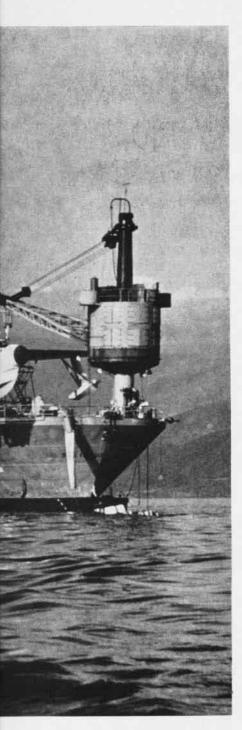
MARCH 1967





THE END OF AN ERA

U.S. Navy patrol seaplanes—those which take off and land on water—are being phased out of the operational inventory over the next two years. Such craft have been flown by Navy since 1911. Three seaplane tenders, the at-sea 'homes' for seaplanes, face decommissioning. Seaplanes were eliminated from the Atlantic Fleet in 1963, and the Pacific Fleet's three 'Marlin' squadrons are now transitioning to land-based patrol aircraft.





FORTY-EIGHTH YEAR OF PUBLICATION MARCH 1967

IN THIS ISSUE

First 'Gramps' Dies 7 NANews joins in mourning the death of Captain "Seth" Warner who, with artist Robert Osborn, created the magazine's

Portable Shipyard?

8 Until this past year, the word "over-haul" aboard USS Saratoga was synonymous with "separation"—meaning the ship had to leave home port, and the crewmen their families. By "bringing the shipyard to the ship," however, the

Orion's Belt 11 Flying ASW missions out of Iceland is a task assigned these patrol crews.

famous "Grampaw Pettibone."

problem has been eased.

Helo Haven 18 A six-page feature in this issue discusses the helicopter—its missions, its men and the ships it works with.

Happy Headshrinking 26 The trouble with aviators and psychiatrists is that they often don't see couchto-couch.

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Issuance of this periodical approved in accordance with Department of the Navy Publications and Printing Regulations, NAVEXOS P-35

■ COVERS with Department of the N On this month's cover, an Orion from Printing Regulations,

VP-10 passes a basalt cliff near Thingeyri on Iceland's northwest peninsula. . . . Above, a P-5 Marlin is hoisted aboard the fantail of the USS Salisbury Sound (AV-13). Photo was taken by JOC R. D. Moeser.

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NAVAL AVIATION NEWS

SEAPLANES AND TENDERS ELIMINATED

On January 19, Secretary of Defense Robert S. McNamara announced 39 actions to consolidate, reduce or discontinue DOD activities in the United States and overseas. Thirty-three of these actions affect military activities in 18 states. The remaining six involve overseas activities.

The principal actions affecting

the Navy are as follows:

1. The Navy will phase out all seaplane operations. Operational aircraft of seaplane (P-5) patrol squadrons will be reduced significantly in Fiscal Year 1967 and phased out completely in FY 1968. With this step, three seaplane tenders and various seadromes will be discontinued. New equipment installed in the P-3 Orion permits the accomplishment of surveillance and ASW missions without the use of the seaplane-tender-seadrome combination.

The Navy will consolidate supply and service efforts and will disestablish the Naval Supply Center, Bayonne, N. J. Current supply support will be reassigned to the Naval Supply Center, Norfolk, Va., and the Naval Supply Depot, Newport, R. I. The continuation, at Bayonne, of a small supply facility will provide support for activities in the immediate New York area as well as for Navy ships in New York harbor. The International Logistics Department of the Center will be established as a separate activity and remain at Bayonne.

3. The Navy will reduce the number of Naval Districts in the continental United States from 11 to 8 by combining District functions of the First (Boston), Fourth

(Philadelphia) and Thirteenth (Seattle) Naval Districts with those District Headquarters scheduled to remain at New York (Third), Norfolk (Fifth) and San Francisco (Twelfth), respectively.

In order to minimize the impact on employees and communities, the actions are to be phased over a

period of several years.

All shore operations associated with scaplanes will be discontinued and operations of scaplane tenders and associated support of all affected worldwide bases will be terminated by July 1969. This will result in the deactivation of scaplane facilities at North Island, San Diego, Calif., and Whidbey Island, Wash., and reductions at Ford Island, Hawaii, Patuxent River, Md., and Corpus Christi.

SecNav Honors for VMCJ-1 Navy Unit Commendation Award

The Secretary of the Navy has awarded the Navy Unit Commendation to Marine Composite Reconnaissance Squadron One.

The squadron was cited for outstanding heroism in action against the enemy while conducting special operations in support of U.S. Navy and Air Force strike and reconnaissance efforts over North Vietnam from April 17 to November 1, 1965.

The citation states in part: "The courageous and professional manner in which each mission was accomplished inspired confidence.... The superb reputation associated with Marine Composite Reconnaissance Squadron One is directly attributable to the untiring efforts of every proud member and epito-

mizes the finest traditions of the Marine Corps and United States Naval Service."

All personnel attached to and serving with VMCJ-1 during that period, or any part thereof, are authorized to wear the Navy Unit Commendation Ribbon.



NAVY'S FIRST 'SEA', GMCM BLACK

Senior Navy EM Selected Former Independence Crewman

A former crew member of the attack carrier *Independence* who has been serving at the Fleet Anti-Air Warfare Training Center, Dam Neck, Va., has been selected as the Navy's first Senior Enlisted Advisor (SEA).

Master Chief Gunner's Mate Delbert D. Black, 44, a native of Orr, Okla., was named from a group of 11 candidates for the new position, which is equivalent to the Sergeants Major of the Army and Marine Corps. He was officially named to the position during ceremonies at the United States Naval Training Center, San Diego, Calif.

The post of Senior Enlisted Advisor was recommended last year by the Secretary of the Navy's Personnel Retention Task Force, a study group appointed to consider problems dealing with keeping skilled and experienced personnel in the Navy.

As SEA, Chief Black will counsel the Navy on problems associated with enlisted personnel and will provide enlisted guidance and leadership in the highest Navy councils. He will work directly for Vice Admiral Benedict J. Semmes, Jr., Chief of the Bureau of Naval Personnel.

A crewman aboard Independence from Jan. 15, 1965, to June 10, 1966, during which the ship won the Navy Unit Commendation for action with the Seventh Fleet off Vietnam, Chief Black was chief master-at-arms at the Dam Neck Training Center when he won the assignment as SEA.

Retirement after 21 Years Salisbury Sound Service Over

The USS Salisbury Sound (AV-13) is to be decommissioned after 21 years of service.

Change of command ceremonies took place at Puget Sound Naval Shipyard, Bremerton, Wash., when Captain Clarence E. Mackey turned over the command to Commander Austin V. Young, formerly the executive officer.

Last November, Salisbury Sound completed a ten-month cruise for the Commander Patrol Force, Seventh Fleet.

The 540-foot tender saw her first battle action during the Korean War. After that conflict, she was active in support of seaplane operations in the Pacific.

While the stunning news of the 1964 Alaskan earthquake still was reaching the mainland, the USS Salisbury Sound quickly put to sea, bound for the disaster area. So fast was her departure that 50 crew members on leave at the time had to be flown to their ship.

Upon arrival at NS Kodiak, AV-13 supplied all electrical power and heating as the station struggled to regain its footing and assisted other seaplanes that arrived to aid the northern base.



LCDR. VERNON Wheat, right, new leader of the Blue Angels who fly the F-11 Tiger, is congratulated by L. J. Evans, President of Grumman Aircraft Engineering Corp., as ex-Blue leader, Commander Robert Aumack, left, looks on. LCdr. Wheat took command on January 10. His previous assignment was with the Bureau of Naval Personnel. Commander Aumack reported to Fighter Squadron 124 at NAS Miramar, Calif., for Fleet refresher training.

Triple Birthdays Noted Navy Engineers Stage Show

Three anniversaries will be celebrated together this year by the Naval Facilities Engineering Command, the Navy Civil Engineer Corps and the Seabees,

The Facilities Engineering Command celebrates its 125th anniversary, its beginning going back to September 1, 1842. CEC is 100 years old the second of this month and the Scabees are 25 years old on the fifth. To highlight the anniversaries, a ball is being given in the International Ballroom of the Washington Hilton Hotel the fourth of March.

The NANews salute to the three celebrants on the back cover features their plaques and a picture of the *Skyhawk* of Marine Attack Squadron 225 which made the first landing at Chu Lai airfield, built in 1965 by the Seabees in 23 days. (The photograph was shot by SSgt. R. W. Sayatt, Jr., USMC.)

For the first time in the history of the Tournament of Roses Parade on New Year's Day, the winning float was a military one: a tribute sponsored by Thailand as a floral salute to the Seabees of the U.S. Navy.

VA-147 is Commissioned Will Fly the A-7A Corsair

On February 1, VA-147 was commissioned as the first A-7A tactical unit in ceremonies at NAS LE-MOORE, Calif. Commander James C. Hill, first Navy Fleet pilot to fly the A-7A, is the new squadron's first commanding officer. He trained at the LTV plant in Dallas.

Squadron pilots and enlisted technicians have been in operational training during the past weeks at Lemoore with VA-122, the *Corsair* training squadron for the West Coast. When VA-147 is fully operational it will have a complement of 25 officers, 240 enlisted men and 14 aircraft.

The new squadron will receive its *Corsairs* from VA-122 this spring. It will be the first A-7A squadron ready for combat operations.



GRAMPAW PETTIBONE

Divert Dividend

Upon an A-3's arrival at a divert field, GCA took control of the Skywarrior at 1,500 feet on a modified base leg. GCA issued a turn to final with instructions to perform the landing check. These were acknowledged. On the glide path, the pilot said he was having some difficulty in maintaining his position because of a light fuel load.

Nevertheless, he proceeded without incident until just prior to touchdown. In switching his attention from the mirror to the runway, the pilot saw pulsing red lights lining the runway. He thought the lights were line-up aids; therefore, no wave-off was initiated. The aircraft settled to the runway without benefit of undercarriage.

Grampaw Pettibone says:

Someday, someone will come up with a Dilbert-proof method of getting the gear down when its supposed to be, but until such time let's all use what we've got—the checkoff list, wave-off lights and our heads.

Check Double Check

It was one of those nights. The Crusader jockey spread his wings prior to leaving the line and en route to the duty had to fold them to permit a civilian jet liner to pass. On takeoff, he noted his speed was normal but the takeoff roll distance was excessive. After liftoff, the gear was raised and the nose seemed to be sensitive in yaw and pitch. At about a 200-300-foot altitude after the wing was lowered, the machine commenced a series of large pitch and yaw evolutions. (PC-1 and PC-2 were fluctuating 800 pounds.)

Recognizing the dilemma at hand, the credulous *Crusader* driver attempted to lock the wing but could not get the locking handle to move into the forward locking detent. Meanwhile, airspeed



had built to 260 knots and altitude to 4,600 feet. The driver then raised the wing and started a shallow right turn back towards the field, dumping fuel en route. (Angle of attack in the turn was approximately 14 units.)

Altitudes, airspeeds, and angle of attack from here on in are not accurately recalled as this pilot's main concern was getting it back on the runway.

Just before touchdown, the incredulous performer realized the landing gear had not been extended and placed the gear handle in the down position. Too late—the boneyard-bound bird landed gear up, wing up, wings folded and,

after coming to rest, was abandoned by the red-faced birdman.

Grampaw Pettibone says:

Great balls of fire! It's a good thing this flight ended when it did 'cause, if there was any more moving parts on this airplane, you can bet this fella would've had 'em all in the wrong place at the right time.

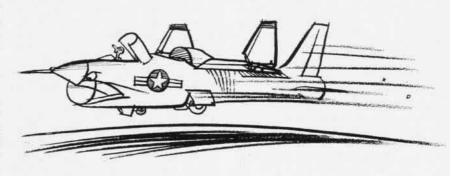
A red face is a mighty cheap price to pay for forgettin' the check list, but this kind of performance ain't much of a boost to the professional standing of an aviator. If Ole Gramps had a nickel for every accident caused by people ignorin' this handy placard, I could buy that farm and retire.

Before you push that kerosene converter handle forward next time, eyeball yourself in the rear view mirror 'cause that's the guy responsible for your safety.

Seahorse Requiem

In preparation for a scheduled vertrep (vertical replenishment), a transient UH-34 was flown off the replenishment ship to the nearby LPH the night before the evolution. This particular Seahorse was not scheduled to participate in the vertrep per se, but was to be the airborne plane guard.

Flight quarters was sounded aboard the LPH at 0530. The transient Seahorse crew members arrived at their aircraft at 0600, conducted a preflight and encountered no discrepancies. (The pickup hook was not functionally tested as



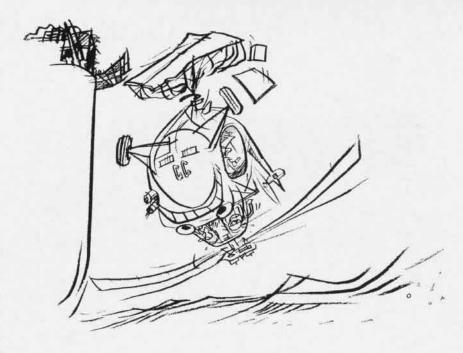
the assigned mission was SAR.) Engine start was a bit sluggish, but rotor engagement and preflight checks were normal.

Takeoff at 0615 was routine and the helo proceeded to a 15-minute orbit while the ships maneuvered for replenishment. During their orbit, vertrep control informed the unsuspecting pilot that he would take part in the vertrep. He "Wilco'd" the instructions and conducted a pickup hook check. (The hook released, but would not recock.)

Vertrep commenced at 0630 on a course of 040°, speed 12 knots, with a relative wind of 18 knots at 340°. The first approach was waved off as the cargo hook was open. On the second approach as the Seahorse came to a hover, the senior petty officer of the helo det ran out and manually recocked the hook. In spite of a moderately pitching deck, pickup of a load of approximately 1,000 pounds was effected smoothly and taken to the receiving ship. Hovering over the receiving area on deck, the copilot attempted to release the load by means of his cyclic thumb switch in the on position. When the hook failed to release, he selected the AUTO position and the hook opened, releasing the load. (This hook malfunction was not reported to the pilot.) On return to the replenishment ship, the senior petty officer on deck noticed the hook had failed to close and signalled deck personnel to recock the hook manually.

Scheduled for pickup was a double load, situated outboard on the ship's port side and identified on the mark-up board as 1,000 pounds. (The weights of all loads were approximate as the ship's scales were inoperative.) The scheduled load's pallet became fouled and the hook-up man selected an inboard load which was nearby.

As the load was hooked up, the crewman called for the pilot to maneuver right to center the load and then up to clear obstructions. The load broke free of the deck and swung back, hitting the originally scheduled load and knocking it into the safety net. The attached load appeared to be free of all hang-



ups and the "clear to go" signal was given by the flight deck officer.

During this time, the copilot maintained a watch on all instruments. They appeared normal; RPM was maintained between 2,600-2,750 with adequate MAP to hold position. As tension was taken on the load, the pilot added collective and started off forward and slightly to port. The load was observed to catch and drag across other loaded pallets, and fall into the port safety net. The pilot felt a jolt and the helo pitched to a 15-25° nose-down position, lost its forward motion and commenced a longitudinal oscillation.

As the load broke free of the net and cleared the ship, the Seahorse began a lateral oscillation, drifted aft toward the ship and rapidly became uncontrollable. (The pilots attempted—without success—to pickle [release] the load after initial jolt, cycling through all three positions of the master cargo switch at least nine times and making two attempts with the emergency foot release.)

The pilot attempted to regain RPM by rapidly and slightly reducing collective, but it continued dropping past 2,400 RPM. The copilot noticed the decaying RPM and reached for the collective to assist in adding power but found

it already "two-blocked" with full throttle. By this time, the helo had drifted back to the ship and the right main mount settled in the net.

Realizing the situation was hopeless, the pilot alerted the crew to an imminent ditching and applied full left cyclic twice in an effort to dislodge the wheel from the safety net and clear the ship. The hung helo came free and fell aft and to port, entering the water tail first. It rolled on its port side, floated for a few moments (ample time for the crew to get clear) and departed for the deep six. Another Seahorse nearby adeptly plucked the crew from the water and safely deposited them aboard ship.

Grampaw Pettibone says:

Holy mackerel, what a mess! The AAR says the cargo hook malfunction was the primary cause of this mishap. I say the pilot in command of that bird did it all by himself, Changin' the mission after takeoff had no bearing on this accident at all. This lad knew he hadn't checked the hook and he had no business to pursue the vertrep any further without a functional check on deck.

Perseverance certainly is a desired trait in a Naval Aviator, but only when it is tempered with inquisitiveness, caution and just plain common sense.



THE SECOND X-22A research aircraft hovers during its maiden flight at Niagara Falls, N.Y., International Airport on January 26. The ducted-propeller V/STOL craft hovered for 26 minutes at altitudes up to approximately 30 feet. While airborne, it turned 90 degrees to the left and right. The X-22A also rotated its ducts from 90 to 75 degrees and moved above the runway at 35 knots. Eight takeoffs were accomplished. The pilots at the controls were Stanley Kakol and Paul Miller. The X-22A is built by Textron's Bell Aerosystems Company under the cognizance of NavAirSysCom.

VX-6 Assists Expedition

Americans First to Climb Peak

After climbing Antarctica's highest peak recently, Nicholas Clinch, Los Angeles attorney, praised the Operation *Deep Freeze* air arm. Leader of a party of ten American mountaineers, he said, "The first ascent of the Vinson Massif would have been impossible without the Navy's air support. They landed us within 20 miles of the massif's base."

The 16,800-foot-high mountain, astride East Antarctica's Sentinel Range, is about 1,300 miles from the main U.S. base at McMurdo,

Air Development Squadron Six (VX-6) flew the expedition from Christchurch, N.Z., to McMurdo Station. A four-engine, ski-equipped c-130 Hercules aircraft, piloted by Commander Arthur F. Schneider, deposited the group and their gear at the foot of the ice-covered mountain. A week and a half later, the party planted the 12 flags of the Antarctic Treaty Nations atop the Vinson Massif.

Parachutist Sets Records First Jump Over the South Pole

Setting records in the Antarctic seems to be easy for parachutist AE2 Henry B. "Jim" Thomann, Jr., jumping member of Air Development Squadron Six's Para-Rescue Team.

Thomann's December jump, the first for a Navyman over the South Pole, set several records: longest free-fall over the Pole, highest jump over the exact bottom of the world, first jump from a ski-equipped C-130 over the 10,000-foot-high South Polar Station.

After getting permission for the jump, Thomann discussed the weather and unusual environment of the Pole with the pilot of the



THOMANN AFTER HIS RECORD JUMP

Hercules, Lt. Frank A. Orr. On the day of the jump the ground temperature was 30° below zero and the wind was just under 15 knots. The speed of the aircraft at jump time was 130 knots into the wind.

The jump was made at 6,000 feet over the station. To compensate for the thin air over the Pole, Thomann breathed pure oxygen just before he went into his 3,500-foot free-fall.

The record making jump was number 500 for Thomann, a former "Chuting Star."

New Course at Memphis

Trains Support Equipment Men

The Naval Air Technical Training Center, Memphis, Tenn., convened the first class of its new basic Aviation Support Equipment Technician course on January 9th. After 11½ tightly packed weeks of technical studies, the 20 Navy and Marine Corps students will be assigned to various AS billets.

The Aviation Support Equipment Technician rating was established in February 1965. In 1966, 1,600 Navy men applied for conversion and 1,113 were selected.

The course is designed to train Navy and Marine Corps personnel in the basics of the new rating. It offers electrical (ASE), hydraulic (ASH) and mechanical (ASM) training. The curriculum includes, among other things, basic electrical circuits, alternating current theory, basic electronics, power generating systems, hydraulics and engines.

Students destined for the course are first indoctrinated in Naval Aviation at the NATTC Aviation Fundamentals School and then assigned preparatory studies at the Mechanical Fundamentals School.

The course itself begins with two-and-a-half weeks of "common core" studies. In this phase, students receive training in fundamentals common to all three AS service ratings. The class is then divided into three groups—the ASE, ASH and ASM programs.

During the following nine weeks, each student is trained in every subject fundamental to the third class petty officer level of his particular service rating. Half of his study time is spent in the class room, the other half in the shops.

FIRST 'GRAMPAW PETTIBONE' DIES

CAPTAIN Spencer Hubert (Seth) Warner, USN (Ret.), the creator of Grampaw Pettibone, was buried with full military honors on January 23 at Golden Gate Cemetery, San Francisco, Calif., as a flight of four U. S. Navy jet aircraft staged a fly-by. Warner, 71, died January 19 in Carmel, Calif.

It was back in 1943 that Captain Warner, collaborating with the artist, Robert Osborn, then a lieutenant in the Navy, created the crusty character who for more than 24 years has used humor, mixed with acidity, to save the lives of

Naval pilots.

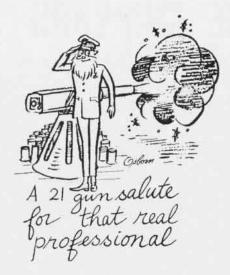
A graduate of the Naval Academy in 1918, Captain Warner had switched from surface to aviation after WW I and graduated in Class 13 as Naval Aviator #2974. His aviation career included command of VT-1, VS-9 and VP-10. On January 18, 1938, he led a flight of 18 patrol planes from San Diego to Pearl Harbor, establishing a record for that time of 201/6 hours.

for that time of 201/2 hours.

With more than 20 years of varied experience in Naval Aviation at the beginning of WW II, his assignment to the Flight Statistics Desk in the Bureau of Aeronautics was appropriate. Borne in on him day after day was the terrible cost of accidents in lives and aircraft. As he studied the accidents, he could not help but ask, "Why were so many of them stupid, 100 percent pilot error?"

What depressed him most was that no material then published—Technical Notes, Technical Orders, Engineering Notes and News Letter—seemed to get "the word" to the pilots though all the warnings and instructions were in them. Two decades in Naval Aviation had shown Captain Warner that even though instructions had been initialed by the pilots, they were often read casually, if at all.

As Warner put it on reviewing his career for the News in 1963, "Something spectacular had to be done immediately to attract attention and make these safety warnings stick. We couldn't convert them into jingles and croon them to pilots over the radio as the ad-



vertising agencies do. What else? What would you have done?

"Naturally, you would have invented a cantankerous old codger with a low boiling point, uninhibited with official language, and turned him loose, hoping that his pithy remarks and sardonic humor would hold your attention long enough to stab you with a vital safety factor—make you Safety Conscious. . . ."

Warner named the old curmudgeon Grampaw Pettibone. He put the problem to his good friend, Bob Osborn, creator of the poster

"hero," Dilbert.

"Bob grasped and endorsed the idea immediately. In an hour he had the first crotchety Grampaw thumping his cane on my desk. And mark my words, the immediate and lasting success of Grampaw P was, and is, in large measure due to Robert Osborn's inimitable ability to portray so strikingly the vital point of any and all safety articles."

Mr. Osborn feels that Captain Warner deserves the credit. Osborn says, "He conceived Grampaw. . . . I wasn't too convinced by his idea. I feared it was too old-fashioned in feeling. Obviously I was wrong. . . . Gramps wouldn't have happened and wouldn't have worked except for Seth Warner."

Both Captain Warner and Mr. Osborn received the Legion of Merit from Secretary of the Navy James V. Forrestal at the end of WW II for their Pettibone contribution.

Since Captain Warner's retirement, six writers have sat in Gramps' chair and Robert Osborn still draws the illustrations in his Salisbury, Conn., home.

In the first appearance of Grampaw Pettibone in the January 15, 1943 BUAER News Letter, he was introduced thus, "Gentlemen, meet an old-timer, P.S. (Post Script) Pettibone, long since retired, but now back in parachute harness." There he was, cane and all, recalling old times, but still right up to the minute on aviation, determined to fly and live.

Despite all the changes in aircraft from props to jets, Gramps is still tops with pilots. Through Gramps, the young fledglings of Naval Aviation and the veterans, too, get the word, punched out sharply sometimes, but never without the feeling that Gramps understands because he's been through it.

Philosophy à la Pettibone took its style and tone from Warner. In early issues in 1943, for example, Gramps wrote: "Do a thing right and you get results; do it wrong and you get consequences.

"It has been said that a man's best friend is his dog, but any good pilot will tell you when you're flying, a man's best friend is altitude

—and plenty of it."

Aviation Safety's debt to the team of Warner and Osborn is incalculable. No computer can gauge the lives saved from death and injury as a result of the lessons Grampaw Pettibone drove home. The dual venture of Warner and Osborn stands as a brilliant illustration of the power of a single idea brought into being at the right time

As "the first Gramps" took his final flight, he left behind him a tradition in safety, different from most memorials: A thin cantankerous chap, drawn by the inimitable Robert Osborn and sustained by other writers whose dedication to Naval Aviation Safety has been inspired by Captain Seth Warner's pioneering example.

BRINGING THE SHIPYARD TO THE SHIP



AERIAL VIEW OF USS SARATOGA SHOWS PIERSIDE FACILITIES INSTALLED TO AID SHIP DURING OVERHAUL

When USS Saratoga returned home late last year from a seven-month deployment that covered some 43,000 miles underway, it was time for the repairs that are always necessary after a ship like ours has seen extensive duty.

Accurately called an "overhaul," the repairs combine into a big job that necessitates a lot of work and a lot of coordination. In years past, such a period also meant a trip for *Saratoga* to a shipyard either in Norfolk or Philadelphia.

But since their ship returned from her last deployment, Saratoga's crewmen have been working to reduce substantially the time spent in one of these yards.

In cooperation with personnel attached to the Mayport Naval Sta-

By Captain Joseph M. Tully, Jr. USS Saratoga (CVA-60)

tion, Jacksonville Shipyards, Inc., and Atlantic Marine, Inc., we have endeavored to "bring the shipyard to the ship." Actually, the process began with the ship's 1965 yard period, with an effort to get shipyard facilities into Mayport so most of the work could be accomplished in our home port.

Before the project could be begun, there was a period of change and elaborate preparation that began even before *Saratoga* returned from her seventh Mediterranean cruise. Atlantic Marine and Jacksonville Shipyards had to gear themselves to handle the problems of a Navy man-of-war. Necessary pier

facilities had to be added at the naval station.

Many conferences were held and many messages were dispatched so everything would be ready by the time the ship returned home.

When we pulled into port October 26, our work was cut out for us. Nearly every department had some repairs to be made or new equipment to be installed.

For instance, on the Med cruise the ship recorded 10,730 landings; such a demanding schedule of air operations naturally left our catapult and arresting gear system in need of work. Boiler repair and ductwork replacement were needed in the engineering plant. Weapons handling equipment had to be serviced. New electronic equipment had

to be installed. Even little things, like typewriters and duplicating machines, needed attention.

All in all, we were faced with a job that would cost \$5 million, or more than \$55,000 a day.

In order to get as much work as possible accomplished in the limited time available, five different forces would have to work efficiently together. They included the ship's company, Industrial Manager Jacksonville (IndMan Jax), the contractors, the naval station and the destroyer tender USS Arcadia (AD-23).

In general, the work forces were

given these assignments:

The ship's company would handle the painting of *Saratoga*, the resurfacing of the hangar and flight decks and would assist the contractors.

IndMan Jax was charged with the responsibility of coordinating the work between the contractors and the ship. In essence, IndMan Jax would be the link between the request and its fulfillment, since work orders would go to him for assignment to the contractor.

The bulk of the work was to be done by the prime contractors, Jacksonville Shipyards and Atlantic Marine, Inc., who would also turn some of their jobs over to subcontractors. A look at just a portion of the list of subcontractors illustrates the variety of work to be done on Saratoga: South Eastern Valve Co., Diesel Engineering Co., Turner Electric Co., General Electric, Westinghouse, Jacksonville Rubber, Atlantic Firebrick, Jacksonville Tile and Dow Chemical. The civilian workers-including at this writing, for example, 505 employees of Jacksonville Shipyards working on the ship plus more on the naval station and at the firm's office—are on the job around the clock, seven days a week, to get everything done.

The fifth force was made up of Arcadia's personnel. They took on the task of repairing some small,

but essential, equipment.

With all these agencies and their personnel involved, a lack of coordination could grind the work to a standstill. But lack of coordination, we found, can be partly controlled by centralization. If everyone has a space he can call his own, where he can be near the work he has to do, much of the confusion can be eliminated.

So, nearly all the management and administrative functions needed to maintain the overhaul are being done right in the ship—to be precise, right in hangar bay two.

Soon after we came into port, we lifted three house trailers aboard and furnished them with office equipment. In these trailers, representatives from the ship and Ind-Man Jax can be near their work. Much of the drafting is also done in one of the trailers.

Adjacent to the trailers is a large, fenced-off area in which the contractors work. The area is also used as a centralized work space, which doubles for tool and equipment storage. A number of portable tool cribs, shops and offices have been erected here. One of the offices is utilized by Jacksonville Shipyards. Workers can bring materials to be worked on to the enclosure and be near special equipment.

During yard periods, heavy traffic on and off the ship can be a headache. This year, we have reduced brow traffic by adding two commonplace, but important, facilities. Vending machines, dispensing hot soup, beef stew and chili, enable more men to eat aboard at noon, using tables we set up nearby. Telephones installed aboard enable workers to make calls without leaving *Saratoga* for that purpose.

COORDINATION of procedures is necessary during overhaul to avoid duplication and red tape. For Saratoga, IndMan Jax personnel have control over these procedures. They have the responsibility for drawing up specifications and ordering equipment. All work requests flow out of their office, and IndMan Jax also inspects all repair work and installations, and initiates corrective action where needed.

Information control is essential to keep everyone informed. This year, we have added a large status board that lists all the jobs to be completed. The board, which takes up nearly an entire wall of one of the trailers, shows at a glance the exact status of any job. By looking at it, a person can see if parts must be ordered, if they have been installed and who is doing the work.

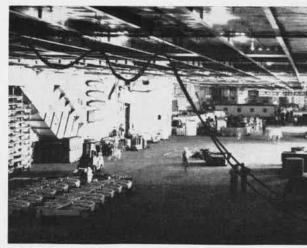
In the Saratoga trailer, there is a smaller board which gives a brief display of information. On this board are listed the number of workers aboard, the various coordinators and a condensation of all the



JOB STATUS BOARD, SHOWN BY AUTHOR, PROVIDES READY REFERENCE



COORDINATOR BRIEFS DEPARTMENT HEADS, C.O., X.O.



CENTRALIZATION KEEPS HANGAR DECK UNCLUTTERE

data on the larger status board. The Saratoga trailer is the ship

The Saratoga trailer is the ship coordinator's office. He is available to all the contractors and IndMan Jax personnel to answer any questions they might have concerning the ship. He is within easy reach of the work and can contact the other coordinators by shipboard phone or outside line. After working hours, his place is taken by a duty coordinator who is available the rest of the night.

Every morning, the ship's department heads, executive officer and I are briefed by the off-going duty coordinator. He gives us the status of certain critical jobs and any information that may have come in during the night. On Thursday morning, representatives from all agencies involved get together for a conference. Here the week's work is discussed and difficulties resolved.

Other points considered for Saratoga's overhaul included:

 The addition of pierside facilities at the Mayport Naval Station, a large factor in getting our work done here. Steam, compressed air, fresh water, electricity and telephone lines were made available to the ship. Station personnel constructed a power terminal on the pier, as well as bringing in a mobile steam-generating plant. These facilities allow us to repair equipment that could receive only minimal attention normally. For example, in years past, our air compressors were constantly in use during the yard period; this year they

can be removed and overhauled.

• Fire, a constant threat in the yard. A fire watch is posted near every welder to eliminate any chance of fire. Continuing inspections, to check on the proper removal of trash, also reduce the possibility of fire and, in addition, they assure that all safety and fire-fighting equipment is in place and operational. Items such as safety nets in trunks and handrails on ladders are checked for strength and proper installation.

During Saratoga's present yard period, a number of small changes have been made from previous overhauls. These small changes have produced big effects, and the most important result of our planning, of course, has been to accomplish nearly all of our work in Mayport. This year we are proving it is possible to bring the shipyard to the ship. Has it been worthwhile? Ask any Saratoga sailor with a family in the Jacksonville area.

ABOUT THE AUTHOR

Commanding officer of USS Saratoga since October 7, 1966, Captain Joseph M. Tully, Jr., is a 1942 graduate of the Naval Academy who hails from San Antonio, Texas. Before he entered flight training in April 1944, he served in two destroyers operating in the Pacific. His first duty as a Naval Aviator was with Fighter Squadron 19A in the carrier Boxer, and he has also served with Advanced Fighter Training Unit 101 (as OinC), Heavy Attack Squadron Five (as executive officer and coramanding officer) and Heavy Attack Wing One (as commanding officer). He is a graduate of the Armed Forces Staff College and the National War College and he holds an M.A. degree from the George Washington University. Captain Tully was commanding officer of the oiler Neosho before coming to USS Saratoga.



INDMAN JAX DRAFTSMAN WORKS INSIDE A TRAILER ABOARD SARATOGA

Taste of far-north patrol . . . waves pounding volcanic shores . . . corrugated ice pack . . . always the lonely ocean . . . a continuous round of flying for VP-10.

ORIONS PATROL NORTH ATLANTIC

Article and Photos by Mark Clevenger

GLOBE-GIRDLING Orions fly out of no more unusual spot than Iceland where they are—in the words of Rear Admiral Ralph J. Weymouth, commander of the U. S. Navy and NATO forces there—"a principal antisubmarine system."

Tourists see Iceland as a wild and tortured topography and farmfilled valleys; moody lakes and great waterfalls; cities heated by natural steam vents and high plateaus divided by volcanic ranges as bare and stark as the moon. But for Icelanders, it is the legendary home of their Viking ancestors; the seat of the world's oldest parliament, the 1,000-year-old Althing; a tight, little island of 190,000 people.

For the U. S. and North Atlantic Treaty Organization forces, it is a



RETURNING FROM PATROL, ORION FLIES PAST VESTMAN ISLANDS, ICELAND

strategic outpost astride the Soviet's main outlet from the Barents Sea and a country they are committed to defend.

Orion squadrons each spend six months a year flying from Keflavik's International Airport.

Patrol Squadron Ten—one of Fleet Air Wing Three's far-ranging outfits—made its first deployment with its new P-3A Deltic Orions to Iceland over a year ago and it is back again this year under the command of Commander Karl J. Bernstein. Commander John Redmond is X.O.

A scant six months after the first P-3 flew into NAS BRUNSWICK, Mc., FAW-3's home station, VP-10 split people and planes and deployed to Iceland and Newfoundland.

At that time, Commander Liona R. "Russ" Roberts, presided over the Keflavik detachment; the rest of his squadron flew out of Argentia, Nfld., under Commander Karl J. Bernstein, then executive officer of VP-10.

"Our mission here is ASW surveillance," VP-10's skipper said.

Outside the window, I could see parked Keflavik-based F-102's of the 57th Fighter-Interceptor Squadron—the other aerial weapon of the Iceland Defense Force.

"We're the eyes for the Navy and NATO," he continued. "But we take on miscellaneous jobs. Search and rescue. Ice reports. Occasionally, when asked by the Norwegians to do it, our patrol aircraft crewmen drop mail to a Norwegian



KEFLAVIK IS NATO AND ICELAND DEFENSE FORCE BASE



THREE ORION 'MAD' BOOMS JUT INTO VP-10'S HANGAR



IN THE FAR NORTH, A VP-10 P-3 FLIES OVER ICY RIVER NEAR HUNAFLOI

Loran station on Jan Mayen Island north of Iceland. It's icebound a good part of the year. For the most part, our life is a continuous round of flying, looking at water, checking planes and equipment, and training."

On a typical day, three of VP-10's planes will be flying. The others will be on standby or undergoing periodic maintenance.

When the squadron transitioned from P-2 Neptunes to P-3 Orions, crewmen each took some 500 hours of classroom training. At Brunswick, three Lockheed men, Resident Representative Frank Hampton, and Service Representatives Ernest L. Corbeil and Dale D. Babbitt, joined other teachers. Corbeil

has had long Electra and P-3 experience and so has Babbitt.

"Representatives develop certain specialties. Mine and Ernie's are transitioning," Corbeil explains. "We help squadron people underderstand the airplane and keep our coveralls handy to dive into the plane's 'innards' with the crew if we're needed."

On a day so clear that the moistly muted Icelandic colors sprang into rich life, I took off from Keflavik in an Orion with the skipper at the controls. This was my first taste of the far north patrols. The P-3 surged off the runway as the pilot two-blocked his power levers.

"I get a kick out of this plane every time I fly it," he said.

In the tactical compartment, crewmen watched screens and dials as electronic gear began probing for contacts and we headed into the Denmark strait.

We flew west—over approximately the same route taken by Eric the Red to discover Greenland and Leif the Lucky to find North America. Somewhere near the milkwhite, corrugated ice pack, with the mountains of Greenland looming ghostlike in the distance, we crossed the Arctic Circle.

We turned east and approached the northwest peninsula of Iceland, ringed with fjords lined by striated cliffs of pure basalt. Over Iceland, we crested the billowing dome of Langjokull, at 500 square miles the third largest of Iceland's many glaciers.

South of Iceland, we passed Surtsev, an island deposited when a subterranean volcano erupted in 1963. The airplane bucked in rough air over an angry sea dashing on the still smoldering cliffs.

The flight engineer, sitting between the pilots, said, "Few of us have seen much of Iceland except from the air, mostly because of raw weather and our workload. When summer comes, we hope to get around a bit more."

Later, Admiral Weymouth (who was detached in January 1967) summarized the Orion's mission in Iceland, "Iceland was among the ten original signers of the NATO Pact in 1948," he pointed out. "It's a staunch NATO supporter today."

Going to a map, he traced with his finger a corridor running from the Barents Sea southwest to the North Atlantic.

This is the Russian outlet from the Arctic Sea," he said. His finger jabbed Iceland on the map.

"Here we are astride any possible unfriendly submarine thrust the Soviets might make. The range and endurance of the Orion are suitable to our ASW problem."

Later, as I walked outside, Ernie

Corbeil tapped my shoulder. "Look," he said. Over the base a sheet of bright light spread, glimmered briefly and disappeared.

The northern lights outlined P-3 Orions roosting outside their Keflavik hangar home. With VP-10, they staunchly guard the sealanes.



AXC GRINDLE INSTRUCTS CREW



CDR. RUSS ROBERTS USES HIS OWN HAM RADIO EQUIPMENT TO CALL HOME



EXPERTS GO OVER 'AIRCRAFT PHYSICAL' CHECK LIST



MAINTENANCE MEN TUNE AND TEND ALLISON ENGINES



IT'S A WHITE WORLD AS P-3 FLIES OVER ICEBERG IN ARCTIC CIRCLE



SEVERA IS VP-10'S LEADING CHIEF

WITH THE MARINES IN VIETNAM

Field Report

An incident-marred truce, the evacuation of more than 2,500 refugees from Viet-Cong-controlled territory and the battle record of a new Marine unit highlighted the final month of 1966 for Marines in I Corps.

For 48 hours during the Christmas and New Year holidays, fighting slowed to a standstill. But numerous VC-inspired incidents—the majority from snipers—kept the Marines from having a complete respite from war.

On December 1, 200 families fled from Son Phuc hamlet and turned themselves over to the Leathernecks conducting Operation *Mississippi* some 30 miles south of Da Nang. The sick, aged and young were evacuated by Marine helicopter. Others trekked out to the vicinity of An Hoa.

Although the operation officially ended December 7, refugees continued to enter the Marines' lines until more than 2,500 had sought the protection of the Leathernecks.

Less than two weeks after the 3rd Bn., 26th Marine Regiment, arrived in Vietnam, the unit was battle-tested when the VC struck battalion positions 12 miles north and west of Hue. In the three-day conflict, the Marines killed 154 VC.

During the month, Marine air-



TWO FIRST Division Marines help to secure the landing zone as CH-46A Sea Knights are unloading troops in order to conduct a search and destroy mission against the Viet Cong.

ground forces killed 628 enemy troops. Of this number, Marine Aviation accounted for 124. Marine jet pilots flew 288 missions in North Vietnam and helicopter pilots flew 32,275 sorties in the south.

The Leatherneck KC-130 Hercules transports carried 46,807 short tons of cargo in support of I Corps units and C-117's transported 6,294 passengers and hauled 208,880 pounds of cargo.

The 100,000th Operation

When Maj. Joseph H. Kane, USMC, set down his *Skyhawk* on the runway at Chu Lai December 7, it marked the airfield's 100,000th A-4 operation and, although the landing took place at 0230, there was a cake-cutting ceremony.

The Marine Expeditionary Airfield at Chu Lai is the first combat airfield of its type in the world. Located on a Vietnam beach, it is a pre-packaged, 8,000-foot air base. Its runway and taxiway built by Seabees are made of interlocking panels of aluminum matting. The airfield was operational 23 days after the Marines arrived at Chu Lai in May 1965 (Naval Aviation News, September 1965, p. 10).

Under Fire

It was LCpl. David J. Simmons' first big action. He was a machine-gunner aboard a CH-37C helicopter

on a routine resupply mission near the demilitarized zone.

The big double-engine chopper had delivered several 55-gallon fuel drums to a Third Marine Division unit when intense automatic weapons fire broke out. Enemy positions on a saddle at a nearby razorback ridge began raking the LZ.

"I guess we weren't on the ground for but 30 seconds after the firing broke out," Simmons said, "but it was the most exciting halfminute of my life. Have you ever been in a car when it's hailing outside? It sounded just like that inside the helicopter.

"One big explosion hit about 20 yards from our plane. I believe it was a 75mm recoilless rifle. But we lifted off and they didn't have another chance to hit us with that."

Simmons returned the fire from the air. "There was all kinds of smoke in the trees they were firing from."

The enemy fire took its toll. All the gauges, instruments and the radio were knocked out. The hydraulic fluid had leaked out and this made only manual operation of the tail rotor by the pilot possible.

Crippled and without instruments, the Marine helicopter limped to the nearest landing zone, Camp J. J. Carroll, five miles away. A CH-46 Sea Knight, flying wing on the disabled helo, also set down there, then flew into Dong Ha with the injured pilot.

Within two days, the CH-37 was repaired and ready to fly again.

"I don't think any other chopper could have absorbed so many rounds and still have been able to lift off the landing zone," Simmons said. "I have a lot of respect for that big helicopter."

DFC for Heroism

Maj. Ray F. Smith, a Marine helicopter pilot, has been awarded the Distinguished Flying Cross "for heroism and extraordinary achievement in aerial flight.'

On December 1, the U.S. Ambassador to the Republic of Victnam, Henry Cabot Lodge, Jr., presented the decoration at Third Amphibious Force Headquarters, Da

Maj. Smith was cited for his actions on September 4 when he piloted one of four CH-46A Sea Knights assigned to retract a Marine ground unit southwest of Da Nang. The landing zone was only large enough for two aircraft to land at once.

Huey UH-1E gunships and fixedwing air strikes were unable to silence the enemy gunners who fired at the choppers on each trip in and

out of the zone. After the planes had picked up the first load of troops, the pilot of the lead aircraft carried wounded to nearby medical facilities and Smith took over as flight leader.

When he returned for the third and final pick-up, only one plane-



RIFLEMEN ignore helo and keep eyes glued to ground during search and destroy duty.

load of troops remained on the ground. They were under attack and in danger of being overrun.

Smith ordered the other helicopters to orbit and went down. He stayed on the ground until the Marines could fight their way to the helo and lifted off only after all were safely aboard.

"His calm disregard for his personal safety was instrumental in the successful retraction of all Marines from the zone under harrowing conditions," the citation reads.

MACS-7 Control Center

The Marine Aircraft Control Squadron Seven's Center, Marine Wing Headquarters Group One, MAW-1, has a twofold mission at Chu Lai.

Under the operations officer, Maj. Kenneth W. Langford, the men at the control center use the latest electronic equipment to maintain a constant alert against an enemy air attack and are ready to provide directional assistance to

friendly pilots.

Should enemy aircraft come within range, the radarscope operator in the center receives a blip on the scope screen. He determines the number, range and bearing of the aircraft and relays the information to another operator who mans a plotting board where a point-bypoint check is kept on the progress of the flight.

The center informs nearby fighter squadrons and planes are sent aloft to intercept the attackers. The scope operator then directs the fighters to the enemy with almost

pinpoint accuracy.

Navigational assistance is always available to friendly pilots. In an emergency, a pilot has only to push a button and the image on the scope's screen is doubled in size. The control center knows his exact location if he is forced down or ejects and a rescue plane can be on its way in a matter of minutes.

Three separate crews man the center's equipment on a round-theclock basis. MSgt. Robert G. Davis is the NCOIC. Though few pilots ever see these men, they rely on them for the safety of their aircraft and airfields within the area of the squadrons' responsibility.



SENATOR Strom Thurmond of South Carolina on Vietnam tour talks with members of Marine Air Group 11 during visit to Da Nang airfield.



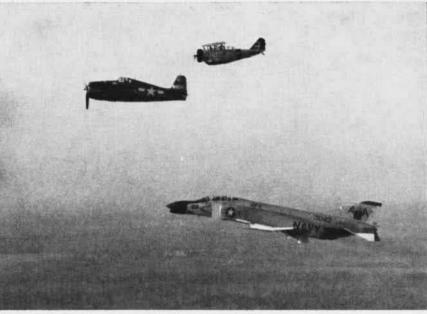
MARINES attached to HMM-161, unload boxes of equipment after landing at MCAF Futema, Okinawa, upon return from Vietnam.

NAVY RED RIPPERS THROUGH FORTY YEARS

At NAS Oceana on January 21, Red Rippers, proud of a name associated with Naval Aviation for 40 years, gathered to celebrate the prowess of their planes and the achievements of their pilots. Host for the reunion was Commander Arthur C. Derrick with his squadron, Fighter Squadron Eleven.

The anniversary was celebrated with an open house, a static exhibition and an aerial fly-by which illustrated the range of aeronautics, props to jets, in four decades.

In the aerial review flew a formation of the Grumman FF-1 (1933), the Grumman F6F-3 (1943), representative of World War II, and a McDonnell F-4B Phantom II, the plane today's Red Rippers fly.



'OLD AND NEW' FLY-BY CELEBRATES A NAME FAMOUS THROUGH 40 YEARS

The FF-1, flown by Captain Bill Scarborough (USN, ret.), was restored to its original condition by Grumman Aircraft Engineering Corporation and marked in accordance with the original airplane flown by the Commanding Officer of the *Red Rippers*. The *Red Rippers* received the FF-1 in 1933, the first airplane produced by Grumman for the Navy.

The F6F-3 *Hellcat*, privately owned and flown by Mr. Peter Brucia, also displayed the *Red Ripper* markings.

The *Red Ripper* insignia has been a prominent one for 40 years and VF-11 today carries on the proud tradition.

Since February 1, 1927, when the

first Red Ripper squadron was commissioned, the name has been associated with great moments and famed fliers. Their aircraft has ranged from the Curtiss F6C-3 Hawk and the Boeing F4B-1 to another F-4B, today's Phantom II.

Space does not permit a detailed account of the occasions proudly remembered by *Red Rippers*. In 1930, a *Ripper* precision flight demonstration team participated in the Chicago Air Races.

In 1933, the long *Red Ripper*-Grumman alliance began and, for the next 17 years, *Rippers* flew Grumman aircraft, the only break coming with the outstanding Chance Vought F4U *Corsair*.

The Rippers were one of only



SOME RED RIPPER C. O.'S WHO CAME TO THE PARTY



OLD CAR AND TWO PROP-DRIVEN PLANES IN THE SHOW



CURTISS F6C-3 HAWK (1928)

a few squadrons to fight the war in both oceans. In the Atlantic they operated from Ranger (CV-4) on the Neutrality Patrol, supported landings in North Africa in November 1942, operated along North Atlantic convoy routes in 1943 and in October of that same year attacked German shipping in the Bodo area of Norway.

In 1944, they were in the Pacific aboard USS Bunker Hill for one month, then the Essex for the remainder of the combat tour. From her deck they launched attacks, winning victories that brought them the Presidential Unit Citation twice. They participated in the American air raids against Tokyo. One of the famed Red Rippers was Captain David McCampbell, later the leading Navy ace.

They transitioned to jets in May 1950, flying the F2H-2 Banshee. In crises, whether in the Middle or Far East, the Rippers have been on duty. Today they fly from the decks of the USS Forrestal.

Among the honored guests at the Red Rippers' Reunion were Vice Admiral Charles T. Booth, now ComNavAirLant; Vice Admiral William F. Raborn (Ret.), Rear Admiral John F. Greenslade (Ret.), Rear Admiral Delbert S. Cornwell (Ret.), Rear Admiral Jack Tate (Ret.) and Rear Admiral Edward A. Hannegan (Ret.).

Skippers of the Red Rippers, shown on the opposite page, are (left to right): Captain E. L. Feightner, Captain J. E. Lacouture, Rear Admiral Tate (Ret.), Commander A. C. Derrick, Vice Admiral Booth, Commander H. H. Lowery (Ret.) and Commander W. L. Mumma.

At the reunion, which was a rousing success, the Red Rippers



BOEING F4B (1929-33)

from four decades spoke of early exploits and recovered some of the history that might have otherwise been lost or forgotten.

Banshees, Crusaders and now Phantom II's have been their aircraft in recent years, but though the planes change, the name's the same, VF-11 insists, "The World Famous Red Rippers."

ADMIRALS WHO WERE RED RIPPERS

Herbert S. Duckworth James D. Barner Osborne B. Hardison Stuart H. Ingersoll Stanhope C. Ring William W. Smith William G. Tomlinson Frederick Trapnell A. B. Vosseller Frank Akers R. E. Blick Clifford S. Cooper Delbert S. Cornwell John G. Crommelin Douglas T. Day Wallace M. Dillon James H. Flatley Francis H. Gardner John F. Greenslade John P. Heath Fitzhugh Lee A. K. Morehouse Carl J. Pfingstag Lester K. Rice W. D. Sample Wendell G. Switzer Jackson R. Tate Frank T. Ward Thomas B. Williamson William F. Raborn R. Townsend Evan P. Aurand Charles T. Booth Joseph Clifton Edward A. Hannegan



GRUMMAN FF-1 (1933)



GRUMMAN F4F WILDCAT



LTV F-8 CRUSADER





HELP is on the way to a downed pilot as a rescue helo lifts off from USS Worden.



CREWMEN fire away at enemy junks and sampans as pilot hovers over downed airman.

Although you'll find them wherever the action is—in Vietnam or in the Atlantic awaiting a Gemini splashdown—Navy helicopter pilots are best known for their daring SAR flights. Here's an example.

HELO PILOT'S TRAITS: TEAMWORK & ABILITY

By JO1 B. J. Bearden, Staff, ComNavAirPac

The two F-8 Crusader pilots have just completed a high-speed, low-level bombing attack against a military target in North Vietnam. Flying in close formation, they pull their aircraft up through a thin layer of gray clouds; ground anti-aircraft fire explodes all around them. Suddenly, one of the F-8's takes a hit. . . .

Just off the coast, the guided missile frigate USS Worden steams in support of U.S. air operations. A few miles away, several carrier-based A-4 Skyhawks are returning from a bombing strike.

The call from the hit F-8 pilot's wingman crackles through radio receivers aboard Worden: "Mayday! Mayday! Mayday! This is Silver Fox 212. My playmate has been hit and has ejected; he has a good chute. I'm bearing zero one zero, six zero miles from you [the Worden]."

From the Worden: "Silver Fox

212, this is Ginger Fish. I hold your position and recommend you remain in the area and try to keep the downed pilot in sight. I'll have a rescue helicopter en route immediately."

Within seconds, the word flashes through *Worden's* intercom system from the combat information center: "Flight quarters SAR! Flight quarters SAR! All hands, man your search and rescue stations." There is no time needed for *Worden* crewmen to ponder the reason for the terse announcement; a pilot is in trouble, and they know it.

For Worden's four-man helicopter SAR team, the signal has special meaning. Assigned to Worden as members of Helicopter Combat Support Squadron One's Detachment Five, team members move on the double to the helicopter that stands on Worden's launching pad on the fantail.

The two officers, LCdr. D. B.



ALERT chopper pilot maneuvers his craft as he listens to radio communications that tell him where the downed aviator was last seen after he left his plane.



AFTER a near brush with death, Navy pilot is hoisted into rescue helo as crewmen ward off enemy's assault.



REFUELING without having to land gives the helicopters added time for operations.

McCracken, pilot, and Ens. R. H. Clark, copilot, may come from officers' berthing or the wardroom. ABCS (AC) H. G. Davis, first crewman, may have been in a shop, in the CPO Mess or in his rack. AMH2 (AC) G. E. McCormack, second crewman, likewise may come from any number of spaces. No matter where they may have been, however, they have reached their helo, turned it up, launched and set their course for the downed pilot in less than five minutes after "flight quarters."

They get airborne so fast, in fact, that word on the pilot's location and other instructions are not passed to them until after their helo is launched. Then it's passed

to the copilot by radio.

Ens. Clark, who acts as communicator and navigator for LCdr. McCracken, checks charts and maps for bearings and the exact location of the pilot. This leaves the pilot free to concentrate on flying.

The two crewmen help pilot and copilot into their armored, protective chest vests, then they don their own. They check the two M-60 machine guns mounted in the right front and left rear of the helo. The rescue hoist gets a thorough going-over.

Spinning rotors carry the helo and its crew closer to the rescue area. Inside, tense now, crewmen wait and watch. "You learn early to expect anything and everything," one will say later. Through his headphones, each listens anxiously to the radio communications.

One message tells them the downed plane was operating from the nuclear-powered carrier Enterprise. Its last plotted location was roughly 60 miles northwest of Worden at a spot the map indicates is a half-moon-shaped, sandy beach. Did the flier bail out over land or water?

That question is still unanswered, but the helo crewmen know that pilots normally try to head for open water if they get hit. The thin strip of virtually unpenetrated jungle that is Vietnam makes it easier for fliers to attempt a water rescue than to attempt a longer, overland flight to friendly territory. But even if they do eject over water, there are enemies as well as friends trying to pick them up.

For instance, helo crewmen consider the fact that the North Vietnamese government reportedly will pay junk fishermen the equivalent of more than \$200 for a captured American pilot—to a North Vietnamese of this class, that's a small fortune. So, he comes armed and ready to shoot anybody or anything to get the bounty.

Nerve center for this search and rescue operation is *Worden's* CIC. Radar, communications equipment and plotting boards enable CIC personnel to track, plot and pinpoint the position of all aircraft flying in the area. With this knowledge at his disposal, the CIC evaluator is able to locate quickly a downed plane and coordinate the search for its pilot.

F-8: "Ginger Fish, this is Silver Fox 212. I'm low on fuel; must return to home plate. Recommend you send relief as soon as possible."

A-4: "Silver Fox, this is Belly 402. We're approximately ten miles from your position. Can we be of assistance to you?"

Worden: "Roger, Belly 402, this is Ginger Fish. Recommend you take station over downed pilot and give assistance as required."

Helo: "Belly 402, this is Ginger Fish Angel en route to downed pilot; estimate overhead two zero minutes." The A-4's are now on the scene, circling a small figure in the water. What further information they can gather is radioed to the rescue craft.

As the helo nears its destination, its crewmen note that the area is infested with junks and sampans. Their crews are searching too; they want a prisoner.

An orange smoke flare is dropped by one of the circling *Skyhawks* to mark the area for the rescue crew.

"I see something," the copilot (Continued on page 22)

WHAT'S AN LPD?

ne of a relatively new breed of ship from which Marine assault troops ply their trade is the amphibious transport dock) USS Vancouver, which could recently be found operating with other ships of the Seventh Fleet amphibious ready group off the coast of Vietnam.

Commissioned in 1963, Vancouver was designed specifically to provide Marine assault forces with a "onetwo" punch from a single ship.

 She carries up to nine mechanized landing craft for conventional amphibious assault.

 She has the capability to send both troops and supplies ashore by helicopter from a helo pad built over the well deck that contains her landing craft.

Just 522 feet long and 104 feet at the beam, Vancouver can send ashore troops of an entire battalion landing team via helo and LCM. Two helos at a time can be launched from the ship; she can carry several more for short periods, but she has only limited repair, and no storage, facilities for them. The ship can operate to within a few thousand yards of shore.

The intensity of recent combat operations and Vancouver's capabilities are depicted on the next two pages by JO1 James Johnston.



MARINE ASSAULT TROOPS BOARD VANCOUVER HELICOPTERS



CREWMEN CHECK BALLAST CONTROL VALVES ABOARD LPD



DECEPTIVELY CALM, USS VANCOUVER (LPD-2),

AVIATION IN 7 VIETNAM OPERATIO

Photographed b



TRACKED LANDING VEHICLES RETURN TO WELL DECK OF VANCOUVER DURING AN OPERATION OFF VIETN



DS OFF COAST OFF VIETNAM BEFORE HELO LAUNCHES

E 'GATOR' NAVY ABOARD VANCOUVER

01 James Johnston



AS CREWMEN RUN OUT HOSES, HELOS LAND FOR FUELING



FLIGHT DECK DIRECTOR BRINGS NAVY COPTER ABOARD



JUST BEFORE ASSAULT OPERATION, HELO STANDS READY



A CREWMAN DOUBLE-TIMES WITH A HOSE

A PILOT'S JOB IN VANCOUVER

By JO1 James Johnston

The air officer aboard the amphibious transport (dock) USS Vancouver thinks he has a pretty unique place in the scheme of things.

Even if he is a pilot without an aircraft, Lt. Lee F. Wright, who heads up a 14-man division aboard the LPD, has seen a lot of action while his ship operated off Vietnam.

Usually, the lieutenant can be found in primary flight control. From there, he directs helo pilots landing aboard *Vancouver*, giving them wind velocity and the ship's speed while flight deck personnel signal them to their spots.

But often during Vancouver's deployment, Lt. Wright used his qualifications to fly UH-2 Seasprites and man Marine UH-1 Iroquois (Huey) choppers for combat missions.

He says the Navy calls his job a proficiency billet, which to him means "you fly anything you can." Since piloting a *Huey* required no major adjustments for the lieutenant, he accumulated 51 hours in one month.

Lt. Wright got his chance at the *Huey* after he told pilots of Marine Helicopter Squadron Six that he would like to get some flight time in.

"They told me they'd be more than happy to have me fly one of the helicopters," he says in a masterpiece of understatement. And he adds:

"Fifty-one hours doesn't sound like much time compared to the 80 to 100 Marines fly every month, but, compared to the 84 total hours I flew last year, it's quite a good bit."



LT. LEE F. WRIGHT. . .

Altogether, Lt. Wright flew 28 missions over Vietnam. He also made two strikes on enemy targets in the armed *Huey*. For his actions, he has been recommended by the Marine squadron for the Air Medal.

Even though flying the *Huey* is not his prime mission, either as *Vancouver's* air officer or as a Navy pilot, Lt. Wright seems to have formed an attachment for the helo.

"I'd like to fly one again," he says. He probably will.



... ON A FLIGHT OVER VIETNAM

Helo Pilots

(Continued from page 19)

says. "Over there, near the junks." It's the pilot; the junks are heading straight for him.

Fishermen in the junks begin shooting at the incoming helicopter. The two crewmen quickly return their fire.

Suddenly, three *Skyhawks* drop through the cloud cover and make a dive for the junks. Making a rocket pass, they hope to draw off the junks' fire long enough for the helo to go in for the pickup. Inside the helo, its crewmen continue firing as the pilot maneuvers seaward, turning his craft so one of the M-60's is aimed toward the junks.

The fire is causing the junk crewmen trouble. Besides the *Sky-hawk* rockets and the M-60's, Ens. Clark has armed himself with a sub-machine gun. He fires at the junks from his copilot's seat. Several of the junks catch fire; a couple begin to sink, and are abandoned by their crews.

Now the helo is in position over the pilot. Chief Davis drops the rescue hoist, watches the man in the water reach out for it. Once the pilot is ready, the hoist lifts him toward safety.

Suddenly, just as their downed airman nears the rescue hatch, bullets ricochet around him. Chief Davis reaches out, grabs him by the wrists and bodily lifts him into the

Lying flat on his back in a puddle of water on the floor of the helicopter, the pilot manages to gasp, "I thought it was all over," before an explosion just aft of the helo makes it lurch forward. The Communists have opened up with mortar fire from the beach, LCdr. McCracken wastes no time; he turns and heads for Worden at full speed, just a couple of seconds ahead of mortar rounds that hit the water where the helo was hovering.

The mission has been accomplished; a life has been saved.

Important an assignment as it is, search and rescue is only one of many missions Navy helicopter pilots are assigned daily. The versatility of their aircraft has enabled them to rescue hundreds of civilians from fires, floods and earth-

quakes. Their craft are used to pluck U.S. astronauts from the sea. They are effective in antisubmarine warfare.

Regardless of the type of work they do, however, Navy helo pilots all have a similar background. Their training starts at Pensacola, Fla., where they are designated students and attend the same classes as

potential jet pilots.

After 13 months of instruction in fixed-wing aircraft, helo pilots are graduated from basic flight training. Next stop is Ellyson Auxiliary Landing Field in Pensacola, where the rudiments of helo piloting are taught the students by experts assigned to Helicopter Training Squadron Eight.

With this 11-week course behind them, the novice helo pilots are bound for Fleet training in the type of "chopper" they'll be flying.

Since ASW is one of the biggest segments of Navy helo piloting, many newcomers to this type of aviation are assigned to the West Coast's ASW training squadron, HS-10, at NAAS REAM FIELD.

Regardless of the type of training they receive, however, Navy helo pilots find themselves in for a busy time of it once they join the Fleet. Their missions will be varied and they possess a versatility that enables them to accomplish whatever is needed of them.

They do have their favorite assignments, though. Take LCdr. McCracken, for instance, and the members of his crew who call themselves the *Froggy Five*—froggy because they operate by jumping from ship to ship, and five for their

detachment number.

"We feel we can do something nobody else can do better," LCdr. McCracken says through the wiry beard he's grown for the cruise, "and that's search and rescue. I've been in this business more than 11 years and I feel there is not a more rewarding experience than saving a man's life."

The Navy has tried to give LCdr. McCracken some kind of reward, however; he wears the Silver Star given him for "extraordinary heroism" during combat rescues in

Vietnam.

There are undoubtedly any number of rescued Navy pilots who feel that's not reward enough.

HOW TO BECOME AN SAR CREWMAN

By AE2 Ron E. Hall, NATC Patuxent River, Md.

H ow does an enlisted man get into the search and rescue business? What does he have to learn, and how is he trained?

First step a potential SAR crewman must take is to volunteer for a six-month training period, then pass a flight physical. His next step is classroom training. Here he studies the workings of almost a dozen types of military aircraft until he knows every aspect of their escape systems and survival equipment.

From the classroom, it's off to a swimming pool for a little recreation—in the form of a lifesaving course. The course being terribly easy to pass, an SAR trainee does it with his flight gear on. Of course, he can remove his boots—while he's in the water—but the clothes stay on. Flight suits do not have the advantages in water of, say, a swim suit.

After swim-time comes vacation. The trainee is taken to a rugged area and left there to commune with nature-equipped with a survival kit, flight gear and a few kind words. This holiday outing lasts a week; most of it is spent in such enjoyable pursuits as searching for food and shelter, although the trainee entertains himself in other ways: He may, for instance, spend considerable effort trying to escape from a simulated enemy thoughtfully provided by the U.S. Marines.

Finally, at week's end, a tired and usually hungry trainee is "welcomed" into a POW camp where some very realistic interrogation takes place. If he survives, he returns to his base to continue training.

This time it's rescue hoists, hooks, seats, booms, nets, litters, grips, slings and other pieces of equipment. Then into a helo for familiarization with normal procedures, emergency procedures, signal and voice communication and hoist operation.

As the course nears completion, the trainee is again loaded into a helo and flown to a site where his instructor enters the water and the student puts his training to use. He practices normal pickups, using proper equipment and

This done, the student is ready for the next step toward qualification: He goes "down the wire" to rescue the instructor. The instructor, however, may decide he doesn't want to be rescued and, simulating someone who is wounded or panicky, he grabs and clutches at the stu-

procedures.

dent; or he may be merely unconscious and as cooperative as a wet noodle. If he really feels good, he may try both approaches.

Once the student overcomes these problems and learns to maneuver the instructor to get him back to the helo (a process that usually takes many hectic, frustrating attempts), he becomes a firstrate search and rescue man.

Now, our man can get down to the serious business of trying to save people's lives. He usually draws a set of orders to an aircraft carrier for the hectic life of an SAR man at sea. It's a rough life, but our man will soon find there are plenty of pilots just waiting to say, "Glad you're here."





IN JANUARY, Captain J. C. Zirkle, commanding officer of NAAS Whiting Field, dedicated a new \$2 million basic instrument flight training complex. The new trainer, 2B21, consists of tour independent cockpits that are operated from one digital computer. This is the first trainer that permits operation of more than two cockpits from a single computer. Additional cockpits can be added to the 2B21. Flight and engine performance characteristics in the trainer are those of the T-28. TC3 R. C. Conklin (left) prepares to program flight to student in one of the cockpits (right). The 2B21 permits individual or group teaching.

Reserves to be Released Involuntary Retention is Halted

The Secretary of Defense has announced that after January 18 reserve officers may not be retained on active duty without their consent. However, a reserve officer will be required to complete any definite term of active duty which he has expressly agreed to serve or which he is obligated to serve. The latter exception covers, for example, reserve officers who are obligated to serve on active duty for definite terms.

Reserve officers now serving on active duty involuntarily, who have heretofore requested release from active duty, will be released as soon as possible under the circumstances, but in no event will they be retained later than June 30, 1967.

Gelled Fuel Study Planned FAA Seeks Joint Navy Effort

The Federal Aviation Agency announces that it plans to enter into an inter-agency agreement with the Navy's Aeronautical Engine Laboratory, Philadelphia, to study the effects of thickened fuels on turbine engine components.

The interest in using gelled fuels in aircraft is due to the fact that preliminary studies have demonstrated that the thickened mixtures are less likely to explode or burst into flames under aircraft crash conditions than regular fuels. FAA has already ground-run successfully a powerful jet engine on gelled fuel at FAA National Aviation Facilities Experimental Center at Atlantic City. The FAA is thus one step closer to possible inflight testing.

Chilean Pilots Graduated Earned Wings of Gold in VT-27

In October 1966, two Chilean Naval Officers received their Wings of Gold at VT-27, NAS CORPUS CHRISTI. Ltjgs. H. O. Higueras and D. C. Marchesse, both graduates of the Chilean Naval Academy, reported aboard VT-27 in August for advanced training in the squadron's Grumman TS-2A Trackers.

The two graduates will report to the Naval Air Station, El Belloto, where they will receive 100 hours of instrument training before they become operational Naval Aviators in the Chilean Navy.

Commander Robert N. Radtke is commanding officer of VT-27.



CDR. RADTKE (C) WITH STUDENTS

Separating Drone Signals Student Trainee Develops Device

David Powell, an 18-year-old student trainee at Point Mugu's Naval Missile Center, has developed an electronic device which will separate miss distance data coming from target drones in the Pacific Missile Range. This allows the center's engineers a quick look at the data before it goes on to PMR's test data division for analysis.

Leo Parolini, Powell's supervisor, says, "It's something you'd expect of a trained engineer, not a student without formal electronics training."

Parolini and engineer Ed Croson decided what kind of device was needed and told Powell, who took it from there. He did most of the design work, made the model and fabricated the finished product.

As a student trainee, Powell will move from job to job in the course of a three-year program, getting work experience over a broad engineering area. He attends Ventura Junior College half a day and works the other half. During the summer, he works full time.

Mugu's New Scoring Device Compatible with National Ranges

Missiles and targets closing on each other at speeds greater than 3,000 feet per second are now under the watchful eye of a photon scoring device developed by the Naval Missile Center at Point Mugu.

An isotope the size of a BB pellet, attached to the missile, emits gamma rays. A pod on the target drone detects and converts the rays to electrical pulses and transmits the pulses by telemetry circuits. A Pacific Missile Range 7090 computer digests the raw data and prints out miss distances.

"We developed the device," Zeger (Zeke) Blankers, test branch head, said, "because photon scoring equipment which could meet NMC specifications was not available commercially."

Missile tests using the new photon scoring device (built to be compatible with telemetry systems on all national ranges) include supersonic *Sparrow*, *Phoenix* and *Side*-

winder air-to-air missiles. These are fired against BQM-34A Ryan Firebee target drones which fly at about Mach 0.97.

The drones are recoverable. Helicopters from the Center's targets department pick the floating *Firebees* out of the water and bring them back for reuse.

MHTG-30 Passes Milestone Training Group is a Year Old

Marine Helicopter Training Group 30, home-based at MCAF SANTA ANA, Calif., has grown in just one year from an idea to a sprawling complex of men, machinery and dark-green wingless aircraft.

MHTG-30, the only Marine allhelicopter training group, is composed of two Medium Helicopter Squadrons, 301 and 302, and Headquarters and Maintenance Squadron 30.

Pilots and maintenance trainees assigned to the Group receive classroom, workshop and in-flight instruction in HMMT-301's UH-34D Seahorses and HMMT-302's CH-46D Sea Knights. H&MS-30 provides logistical, maintenance and administrative support.

Commanded by Colonel Virgil D. Olson, MHTG-30 has trained several hundred pilots and enlisted men in its first year.

NATW Phase-Out Begins VR-7 Decommissioned at Moffett

Early in January when Captain Roy P. Gee, commanding officer, Air Transport Squadron Seven, touched his plane down on the runway at NAS MOFFETT FIELD, he marked the beginning of the end for Naval Air Transport Wing, Pacific.

Captain Gee had just finished the last flight of VR-7—a 20,000-mile round trip to Southeast Asia. The squadron, a unit of NATWPac, was decommissioned January 31. Other units of the Wing are being phased out this year. VR-22 will be decommissioned in April and VR-8 in June. Another squadron, VR-3, home-ported at McGuire AFB, N.J., will be decommissioned in June. Navy's withdrawal will end a partnership

which began in 1948 when the Navy and Air Force merged to form the Military Air Transport Service (MATS).

VR-7, third Navy squadron to bear that designation, was commissioned in April 1953 at Hickam AFB, Hawaii, as part of the Military Airlift Command. In 1957 the Sea Horses moved to Moffett Field under the reorganization that formed the Wing.

In the early years, squadron members flew *Super Connies* while accomplishing their mission; to transport military and civilian personnel and their families to duty stations throughout the Pacific.

In 1963, the first C-130E Hercules was delivered to VR-7. With the Hercules came additional duty—flying support operations and airlifting troops and equipment. Since June 1965, VR-7 has logged 61,760 flight hours and 755 combat missions.

The 2,200 men of NATWPac will be transferred to various units throughout the Navy. The aircraft will be transferred to the Tactical Air Command.

Award for a Navy Doctor Worked with NASA Astronauts

Captain Louis P. Ballenberger, Navy Medical Corps, received a commendation on January 13, 1967, at the Naval Aerospace Medical Institute, Pensacola, for his outstanding work in support of *Gemini*.

Captain H. C. Hunley, Medical Corps, commanding officer of the Institute, presented the letter and certificate. Captain Ballenberger was the only member of the primary or alternate DOD Space Flight Crew Medical Evaluation Team who participated in every manned Gemini mission.

The letter included a "Well Done" for Dr. Ballenberger's preflight examinations of the Astronauts, his professional work aboard recovery carriers, and for being "a fine team worker, well liked and respected by the many Astronauts he helped to evaluate."

Dr. Ballenberger is the Director of the Professional Services Department at NAMI and performed his NASA functions on an "additional duty" basis.



AT ATSUGI, American Ambassador to Japan U. Alexis Johnson attended a briefing by Rear Admiral Marshall W. White, Commander Fleet Air, Western Pacific, toured the air station with the C.O., Captain A. M. Porter, and visited the adjoining Japan Aircraft Manufacturing Co., Ltd. Above, he is shown with Captain Colin J. Ricketts, assistant chief of staff for material, ComFAir WestPac, and two employees at the aircraft plant.

THE MARTIN-BAKER COUCH OR INNER MAN AND OUTER SPACE

'There is a vast literature already about man in SPACE, but almost no literature about MAN in space; the psychological dimension of our readiness for space, our capacity to make space ours, has been strangely lacking.'

-Gardner Murphy, 1961

By LCdr. Joseph A. Pursch

AT A RECENT meeting of the American Psychiatric Association, there was a symposium on "Space Psychiatry." This clinical subspecialty is now only a little over ten years old.

When it comes to psychiatry in general, the average Naval Aviator normally expresses his feelings about it in the following manner: If he is introduced to a psychiatrist, say, at a cocktail party, he usually raises a jovial glass and good-heartedly says: "Doctor, I am sure glad to hear that's what you're specializing in, because I want you to meet my wife here—ha ha." In other words, he regards psychiatry

in the same way that most people consider a voluntary cut in salary: "A very good idea, no doubt—but not for me."

In view of this covert antipathy toward psychiatry, I thought that the Naval Aviator might be interested, or perhaps amused, to learn how the "couch doctor" views the successful pilot.

According to an article by P. M. Fine and C. L. Jennings, entitled Coping and Developmental Theory: Applicability to Selective Study of Normal Men, the average U.S. Air Force pilot is "of superior intelligence, averaging an I.Q. of 119," which qualifies him for "al-



The drive to continue flying exceeds other ambitions.



'Doc, I'd like you to meet my wife.'

most any professional training, including medicine." (I can hear you say that you have always suspected this much about yourself, but it IS news if it also applies to Air Force

pilots.)

The report goes on: "The firstborn product of a stable, middleclass, urban, Protestant family, he was reared in a practical, matter-offact environment, emphasizing discipline and responsibility. Typically, he developed into a rather organized, pragmatic, concretely-oriented, aggressive man of action, who tends to be more narcissistic than his civilian peers." (An aviator friend of mine objected to "narcissistic" as possibly a dirty word. When I told of the Greek youth who was fascinated by his own reflection, my friend said, "If YOU don't love yourself a little—who else WILL?" He also wondered if "concretely-oriented" could mean blockhead, but happily agreed that he too preferred gadgets to philosophy, electronics to abstract art.)
He "handles the more sensitive

He "handles the more sensitive interpersonal relationships somewhat distantly, does not fully exercise his superior intellectual potential" (Boy, ain't that the truth, you

say about your co-pilot), and he "derives his major satisfaction from mastery of, and competence in, increasingly complex airborne vehicles" (a little wordy, perhaps, but no real argument here). "The drive to continue flying operationally exceeds his ambition for rank progression, duty assignments, or personal power or position of public recognition.

"Because flying is his prime military satisfaction, the flight surgeon, who has the power to temporarily, or permanently, ground him for adequate medical reasons, is often considered a threat. (Listen, Doctor, I just passed a real thorough physical two weeks ago when I detached at my last duty station. How, about making this a short one, eh?)

"He is not truly introspective and, more characteristically, if threatened will attempt to manipulate the environment rather than look inward and make some personal change in attitude or approach. (That CAG doesn't know a tiger when he sees one—I'm sure glad I'm getting orders soon.) Emotional implications tend to be denied, or discounted. (You mean to tell me that fear can give a guy diarrhea?-Come on now, Doc!—with indignant disbelief.) Military aviation meets his needs for excitement, responsibility, mastery and achievement. His need to limit close personal relationships allows him to accept much more gracefully the sudden or prolonged separations from family because of military duties than would his average civilian peer." (If you got time to spare-go Naval Air.)

Actually, in somewhat toneddown psychiatric jargon, this sketch depicts a group of men of unusual achievement and potential, or "supernormals," if you will. Not to be overlooked is the fact that they are aggressive, action-oriented, extroverted achievers who are not ordinarily given to ruminating about the relationship between a man's feelings and his actions; and who tend to dissipate emotional tension by getting busy and doing something, with the emphasis on "doing."

This raises the question of how

Illustrations by LCdr. Neil F. O'Connor



'Got to love yourself a little.'

well the "supernormal" aviator is suited for future space probes, where much of his activity will consist of monitoring instruments, many of which are controlled by other men at stations thousands of miles away. He will only occasionally get a chance to make a few corrective mechanical adjustments until a momentarily errant computer takes over again.

Emotional tension will be unavoidable because the trips will be long; the spaces, both cramped and crowded. When antagonistic feel-

ings from too much togetherness create high levels of emotional tension, then the customary approaches of "doing something" or "getting away from it all for a while" won't work as well as they normally do when such things as a rubber punching bag or 30 minutes of sulk-time in the air lock are available options.

The best calculations presently available put a round trip to Mars at 970 days, with only one in-port period, complicated by the disturbing possibility that the natives, if any, might be not only unfriendly, but perhaps even unrecognizable by our usual standards. Just as the free-wheeling, braggadocio flair of the successful "goggles and scarf in the wind" flier of yesteryear differ from today's self-disciplined, teamoriented, chain-of-command pilot, so will there be a shift in personality traits required of the interplanetary explorer. Numerous experimental studies are going on in many places to enable us to anticipate some of the problems of MAN in space.

The feasibility of psychoanalyzing the crew in preparation for such a long journey comes to mind, of course. But this is not yet a serious consideration, because, after logging several hundred hours on the couch, the treatment may have been so successful that the man may no longer want to go.



'I just passed a thorough physical two weeks ago.'

FLEET AIR WINGS ON PATROL





LTJG. SCHMIDT PRESENTS BURGEE TO CDR. WALKER

THREE VP-47 PILOTS HAVE FLOWN SOME 7,800 HOURS

A Burgee for VP-4's C.O.

In a special ceremony at NAS BARBER'S POINT, Ltjg. Terry Schmidt, the squadron's aviation equipment officer (left, in picture above) presented a burgee command pennant to Commander Charles M. Walker, VP-4's commanding officer, as the gift of the squadron. The pennant had been made by PR3 C. R. Faughn.

The burgee indicates command of a major subdivision of Fleet Air Wing Two. Cdr. Walker directs VP-4 in its varied missions—ASW, shipping surveillance and reconnaissance patrols.

Fair Exchange

VP-11 and the USS Nathaniel Green (SSB (N)-636) got well acquainted in Rota, Spain, when they provided mutual services for each other.

The aviators toured the submarine and the submariners were given a full briefing and tour of VP-11 aircraft. Commander Bob Crispin, the *Green's* C.O., received an orange flight suit and sat in the copilot's seat of an SP-2H while Commander Rudy Falkenstein, VP-11 C.O., executed a routine preflight up to and including an aborted takeoff.

Upon returning to the line, Cdr. Falkenstein gave Commander Crispin a name patch for his flight suit which read, "Bob Crispin, Cdr., Honorary VP-11 Aviator."

Not to be outdone, Cdr. Crispin returned to the VP-11 spaces dressed in his orange flight suit. He brought a familiar blue "Polaris suit" for Cdr. Falkenstein, a suitably inscribed name patch and the submarine's coat of arms.

Can You Top This?

The men of VP-47 believe they have a first. Three of VP-47's pilots have a cumulative total of over 7,800 flight hours in the P-3A Orion. These officers are the C.O., Commander A. L. Jansen; the maintenance officer, LCdr. D. A. West, and the standardization officer, LCdr. C. A. Sandler. In photo they are shown with Frank Hayes and Warren Biedler, Lockheed.



VP-42'S WINNING CREW SEVEN

Many of their flight hours include combat patrols over the coastal waters of Vietnam and the South China Sea during the squadron's recent deployment.

Following their support of Seventh Fleet operations in Southeast Asia, VP-47 pilots completed 40,000 accident-free hours of flying.

Totem Pole Winners

Two competing VP-42 crews captured perfect scores in the rockets and bombs phase of the Totem Pole competition between patrol squadrons based at NAS Whidbey Island. The Seademons captured both Top Crew and Top Squadron honors.

Crew Seven, commanded by LCdr. Joe Pickell, nosed out a VP-2 crew for top honors. The second VP-42 crew, led by Lt. Karl Kostenbader, took third place. The combined first and third-place finishes gave VP-42 more than a 1,000-point margin of victory over the runner-up outfit, Patrol Squadron One.

Each crew ran a complete ASW program in the weapon systems trainer and competed in the loading of 2,000-pound mines. The inflight phase consisted of photography, low-altitude bombing, rockets, electronic countermeasures, mining and navigation.

Since returning from Vietnam in April 1966, VP-42 has won honors in two out of the three quarterly competitions held at Whidbey. Rear Admiral Joseph A. Jaap, Comfair Whidbey, presented Commander Robert M. Thompson, VP-42 C.O., with the totem pole, emblematic of victory. He also commended LCdr. Pickell and his crew on their superb job.

Return to Brunswick

On January 13, 350 officers and men of VP-26 returned from a sixmonth deployment to Iceland and Newfoundland.

The commanding officer, Commander K. F. Cook, departed NS Keflavik, Iceland, leading a formation of five P-3B Orions. While flying over NS Argentia, Newfoundland, Commander Cook was joined by the squadron's remaining four P-3B's under the direction of Commander J. A. Cochran. One hour later, the nine patrol planes touched down at NAS Brunswick, Maine, home port of the Trident squadron.

Most of the 250 non-flight personnel who comprise the support and maintenance sections of the squadron were transported to Brunswick via huge Air Force C-141 Starlifter jets.

This was VP-26's first deployment since becoming the Navy's first squadron to transition to the "B" version of the *Orion* in January 1966. The squadron is no stranger to either Iceland or Newfoundland. It previously had been deployed to Keflavik in 1961 and to Argentia in 1962.

During the deployment, the Tridents were acting as a NATO force working with units from Norway, Denmark, Germany and the UK.

In September 1966, the Argentia detachment played host to an ASW crew from West Germany. The VP-26 crews seized the opportunity to fly the Germans' modern ASW aircraft, the Breguet Atlantic. Two months later, VP-26 returned the visit.

The squadron in Iceland also exchanged ASW procedures with foreign allies. In November, the third ranking officer in the Royal Norwegian Navy, Rear Admiral R. M. Tamber, was the squadron's guest.

In addition to flying antisubmarine patrols, the *Tridents* were also involved in shipping surveillance and search and rescue missions. On a normal ten-hour shipping surveillance patrol, VP-26 crews would investigate as many as 350 ships, including Soviet fishing and merchant vessels.

The squadron logged over 1,000 flight hours each month of the deployment. This rugged schedule, plus the strain imposed on the aircraft by heavy snows, high winds and cold, made good maintenance a "must" and the maintenance men did an outstanding job.

VP-26, one of the five maritime patrol units assigned to Fleet Air areas as Kiska and Attu. For his action, the young AD2 received the Air Medal in June 1942.

Times have changed and so have conditions in the north Pacific. LCdr. Schreck, who since 1942 has worked his way up to his present rank, now has to contend with the maintenance problems of a very sophisticated aircraft, the P-3A. Although living conditions at NS Adak have greatly improved, one thing has undergone little change. This is the basic job being done by patrol aircraft: protection of



SHIPPING SURVEILLANCE WAS ONE OF VP-26'S MISSIONS ON DEPLOYMENT

Wing Three at Brunswick, was relieved in Iceland by another FAW-3 outfit, Patrol Squadron 10.

Adak Veteran

The Blue Geese of VP-22 are once again stationed at NS Adak, Alaska. No newcomer to the station is VP-22's maintenance control officer, LCdr. Milton Schreck.

LCdr. Schreck first stepped ashore on the island of Adak in 1942 as a crewman aboard a PBY. At that time, there was more than cold to fight in the Aleutian Chain. Aircrewman Schreck slept first in tents, then in quonset huts, on a barren hillside, and flew patrols against the Japanese forces in such

our sea lanes and coastal areas. This task still remains paramount.

Changes of Command

Commander John T. Coughlin relieved Commander Jack D. Fuller as commanding officer of VP-22.... Commander R. B. Mahon relieved Commander J. H. B. Smith as VP-9 skipper.... Commander Milton O. Paul is the new commanding officer of VP-17. He relieved Commander Leland A. Holdren.... Commander Richard B. Campbell accepted the VP-2 flag from Commander Homer C. Ragsdale January 11.... Commander John V. Josephson relieved Commander Marvin D. Marsh as C.O. of VP-5.

SELECTED AIR RESERVE

Services for Admiral Fowler

At Arlington National Cemetery, Va., full military honors were accorded January 23 for Rear Admiral Richard L. Fowler, USN, Chief of Naval Air Reserve Training, who died in a fire at his quarters at NAS GLENVIEW, Ill.

Admiral Fowler graduated from the Naval Academy in the class of '36 and became a Naval Aviator in 1939. In his 30-year career as a naval officer, he filled a variety of assignments with primary duty in Naval Aviation. He commanded several air squadrons, an air group, three ships (Essex, Salisbury Sound and Leyte) and served on several staffs specializing in aviation.

Before becoming CNAResTra in 1965, Admiral Fowler was Commander of the Seventh Fleet Patrol Force. In this capacity he was awarded the Navy Commendation Ribbon for the success of Operation Market Time.

Admiral Fowler also held the Navy Cross, Distinguished Flying Cross, Air Medal with five gold stars and Presidential Unit Citation



REAR ADMIRAL RICHARD L. FOWLER

in addition to his other ribbons. The Navy Cross was awarded for "extraordinary heroism" in action against the Japanese Fleet during the battle of Samar on October 25, 1944. Admiral Fowler personally scored three heavy bomb hits on an enemy battleship and contributed to the sinking of a cruiser.

The New Look

The Naval Air Reserve Training Command started the year with a major reorganization of its 18 Air Wing Staffs. Each Air Wing Staff was decommissioned and two new units were commissioned. These new units are the Naval Air Reserve Staffs or NARS and Naval Air Reserve Divisions (Fleet Air) or NARDIV (FA).

The new organization is designed to provide increased supervision and individual guidance for rate training by developing a more comprehensive division officer program. It is also designed to provide more efficient administrative support to NAS/NARTU officers and Selected Air Reserve squadron C.O.'s.

A NARS unit consists of administrative/personnel officers and yeomen (personnel) detailed from NAS/NARTU squadrons. Although assigned to a parent squadron, these officers and men provide the clerical support for all Selected Air Reserve squadrons at their activity. Reserve officers and enlisted personnel, in non- or associate-pay



CAPTAIN ROBERT T. Kieling is shown going over in some detail with Rear Admiral William I. Martin, Assistant Chief of Naval Operations (Air), the results of an 18-month study which Captain Kieling and others made of the total Naval Air Reserve Program. Captain Kieling was Coordinator, Naval Air Reserve, on the staff of DCNO(Air) for over four years. He was readying the report to present to Secretary of the Navy Paul Nitze.



CAPTAIN Berton R. Otto received the Navy Commendation Medal from Vice Admiral T. F. Connolly, DCNO(Air). Captain Otto, a Naval Air Reservist, was cited for reducing and combining 6th Fleet reports.



AT NAS Dallas' 25th anniversity, Capt. V. P. O'Neil presents Distinguished Service Award to D. H. Byrd, founder of NAS and CAP.



AS NAVYMAN stands guard, Air Force personnel at Da Nang unload cargo from the VR-881's C-118 Liftmaster from NAS Olathe.

status, are assigned specific non-pay billets within the NARS. An officer counseling board and an ASW operations control center division at each activity are also under the control of the NARS. NARS is the responsibility of the NAS/NARTU

training officer.

The NARDIV (FA)'s are composed of personnel assigned to the combat information center, naval weather service, training devices, non-rated, dental, communication, photographic, ship augmentation unit, supply and medical divisions. During weekend drills they are assigned to the appropriate NAS/ NARTU departments for training. All non-rated personnel, except designated strikers, are assigned to a program similar to the former Air Wing Staff X division. NARDIV (FA) is under the control of the aviation technical training officer at each activity.

Change of Name

The Naval Air Reserve Electronics Training Units of NAS Los ALAMITOS and NAS WILLOW GROVE have a new name given them by CNAResTra in an effort to more closely identify them with their current mission. They are now Naval Air Reserve ASW Tactical Schools, West and East respectively.

St. Louis Reservists Tour

Three officers and 28 students of Naval Reserve Medical Company 9-22 from the St. Louis University Medical School recently were guests

at NAS PENSACOLA. They toured the Naval Aerospace Medical Center and spent a day on board USS Lexington.

They were briefed by Rear Admiral H. H. Eighmy, C.O. of the Medical Center, and Captain H. C. Hunley, C.O. of the Naval Aerospace Medical Institute. toured the low pressure chamber and rotating room at the Institute. They were also shown a film entitled, "Doctor on the Flight Deck."

Nine members of 9-22 became Navy medical officers last June when they graduated from the St. Louis medical school.

Top Man

AMS2 Lowell R. Blatchley, NAS Dallas, is the only enlisted man to make 4.0 at the C-118 Simulator Ground School at NAS GLENVIEW. The school, designed to acquaint Navy personnel with aircraft systems and operation of the c-118, trains qualified plane captains. C-118's are currently used by Reservists in the Vietnam airlift.

Boss and Family Day

"What is going on out there that is so important you can't be here?" is the question most frequently asked of Weekend Warriors by their families and bosses when their training interferes with family outings and overtime work.

Attempting to answer the question, Commander Philip Gannon, C.O. of HS-731, NAS GROSSE ILE. hit upon the idea of having a combination "Boss and Family Day."

More than 40 bosses and family members of squadron personnel came to the air station where they were greeted by the station's commanding officer, Captain R. K. Commander Gannon briefed the visitors on the squadron's history and mission. The guests toured the station and squadron spaces, witnessed a fire-fighting demonstration and a simulated airsea rescue and ended the day with a steak dinner for everyone at the Bachelor Officers' Quarters.

Vietnam Airlift Continues

Recently 15 Naval Air Reservists from NAS OLATHE loaded their C-118 with "Priority One" cargo at Point Mugu, Calif., and headed for Da Nang, Vietnam, via Hawaii, Wake and Guam. The men of VR-881 were doing their share in the Reserve's Vietnam airlift.

After two and one half hours at Da Nang, the plane was unloaded and they were on their way to NAS Cubi Point. There they learned that two other planes from their squadron had returned from Da Nang and were now delivering priority goods to Chu Lai. They also found that a sister squadron. VR-933 of Willow Grove, was flying the airlift from Hawaii during the same period.

And so it goes, this airlift. Nearly all Naval Air Reserve Transport squadrons have flown special tenday volunteer cargo missions to Vietnam in this vital operation.

AT SEA WITH THE CARRIERS



AN RA-5C is launched from Independence as the CVA operates in the Med. During her recent deployment, ship hosted ComNavAirLant and the U.S. Ambassador to France.

ATLANTIC FLEET

INDEPENDENCE (CVA-62)

Ltjg. D. L. McGuire, VA-86, made *Independence's* 95,000th arrested landing in an A-4 *Skyhawk*.

AMERICA (CVA-66)

America left Norfolk for her second deployment with the Sixth Fleet in the Mediterranean. The cruise is expected to last more than eight months.

During the Med cruise, America, commanded by Captain D. D. Engen, will be flagship for Rear Admiral Dick H. Guinn, ComCarDiv Four. CVW-6 squadrons embarked include VA's 64, 66 and 36; VF's 33 and 102; RVAH-5; VAH-10; and detachments of VAW-12, VAW-33.

FORRESTAL (CVA-59)

With a nine-month overhaul at the Norfolk Naval Shipyard completed, *Forrestal* got underway for a five-day post-repair trial cruise in the Virginia Cape area.

Air operations, the first held since the carrier started the over-haul, were conducted. First plane to land was a C-1A *Trader* piloted by LCdr. C. S. Hosier.

RANDOLPH (CVS-15)

HS-5 personnel claim their squadron set three monthly records for East Coast HS outfits while they were aboard *Randolph* as the CVS

participated in LantFlex 66, a major Atlantic Fleet exercise.

Records being claimed are for most flight hours in a month (1,232), most night carrier approaches to a sonar hover in a month (616) and most total carrier approaches to a sonar hover in a month (1,675).

GUAM (LPH-9)

Comedian Red Buttons was master of ceremonies for a USO-sponsored show presented aboard Guam for crewmen of the LPH and other units of PhibRon Eight. Also attending the show, given while the ships were in port in San Juan, Puerto Rico, were crewmen of the British destroyer HMS Defender.

Before the show, the entertainers were treated to lunch aboard *Guam*, and were presented with plaques.



UNDERWAY in the Caribbean Sea, America prepares for her second deployment with the Sixth Fleet. CVA will be ComCarDiv Four's flagship during the eight-month cruise.

PACIFIC FLEET

BENNINGTON (CVS-20)

When the destroyer USS O'Brien was hit by Communist shore batteries as she steamed about three miles off shore in the Gulf of Tonkin, crewmen of Bennington were quick to respond with help.

Two O'Brien men were killed and four were wounded when a shell penetrated a deck house in the after port section of the destroyer and exploded. Damage was

described as light.

Trackers from VS-38 aboard Benn provided aerial spotting information as O'Brien gunners pumped some 130 rounds of 5"/38 ammunition into the battery area and jet aircraft from the carriers Enterprise and Kitty Hawk struck

at the emplacement.

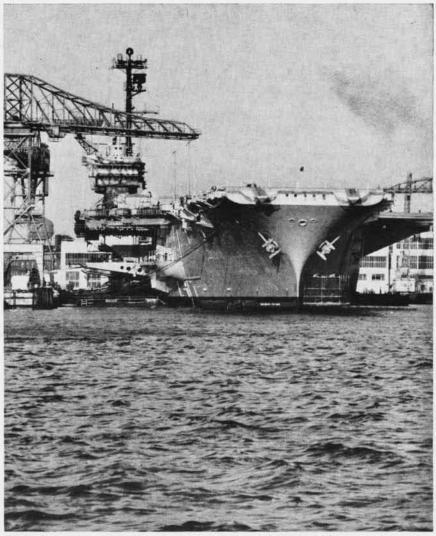
Lt. Anthony D. Schilling, a Bennington medical officer, and HM2 A. J. Kacala were flown to the destroyer by an HS-8 helicopter to treat the wounded. Another HS-8 helo hovered near O'Brien to transport injured destroyermen. One badly wounded man was given first aid and flown to Bennington within a half-hour; he was later flown to the hospital ship USS Repose. Altogether, three of the O'Brien's wounded were airlifted to Benn.

The two helicopters were piloted by Lt. Kenneth R. McCarty and Ltjg. Alexander B. Everetz. Copilots were Ltjg.'s Richard J. Hanna and Cornelius Shea; crewmen included AX2 Robert E. Wood, HM2 William A. Fairborn, II, and AX3's John Dewey, Jr., George N. Penniman and Charles K. Soliah.

Comedian Bob Hope and his troupe of performers braved a pitching flight deck and 35-knot gusts of wind to entertain *Bennington* crewmen off Vietnam.

Flown to Benn after completing a show at Qui Nhon, South Vietnam, Hope was accompanied by comedienne Phyllis Diller, Reita Faria (Miss World 1966), singers Anita Bryant and Vic Damone, the three Korean Kittens (a vocal group), baton twirler-dancer Dianne Shelton, singer-dancer Joey Heatherton and bandleader Les Brown.

The two-hour show (pictured on



FORRESTAL, shown here just before she left the Nortolk Naval Shipyard after a ninemonth overhaul, has completed a five-day post-repair trial cruise off Virginia Capes.

page 36) presented the next day included jokes, songs, dancing and skits. After they performed for *Benn* men, the entertainers were airlifted to the carrier *Franklin D. Roosevelt* for another performance.

Returning to *Benn*, they spent the rest of the day touring the ship and visiting with crewmen.

Benn men wasted no time reciprocating for the entertainers' efforts in their behalf. They cheered and applauded (actions which Hope once called a "tonic" that made the trip worthwhile by itself), and Captain Richard Graffy, Benn's C.O., presented Hope with a ship's plaque.

The greatest compliments, however, were paid to Phyllis Diller. She found a secret admirer among Bennington's crew, a bashful type who greeted her with a sign as she clomped on stage in combat boots. It read, "We Love U Phyllis." It was signed, "The Phantom Moose."

Crewmen assigned to *Benn's* V-2 Division were more outspoken in their affection for Miss Diller. They unanimously selected her as "Miss V-2 of 1966."

CORAL SEA (CVA-43)

Shortly after the last of the provisions, general stores and ship's store stock arrived on Coral Sea's number two elevator, Captain George Watkins, commanding officer of the stores ship USS Mars, informed Coral Sea skipper Captain Frank W. Ault that the rate of 91.5

short tons per hour set by the two ships during a vertical replenishment "is the highest achieved to date by any carrier with Mars."

More than 183,000 pounds of supplies were heloed from *Mars* to *Coral Sea* by HC-1 helicopters in less than an hour. And, while the vertrep was in progress, an additional 79.6 tons of supplies—122 individual loads—were moved between the ships over the more conventional *Burton* rigs.

BON HOMME RICHARD (CVA-31)

The Bonnie Dick and the ASW carrier Hornet were the two CV's participating in Snatch Block, the first major First Fleet exercise of 1967.

Held off the coast of southern California, *Snatch Block* included 25 ships and 27 air units. Vice Admiral B. F. Roeder, ComFirstFlt, was in over-all command of the exercise, which stressed air, antiair, surface and subsurface warfare.

An EA-1F Skyraider, piloted by LCdr. George Miller, VAW-13, made Bonnie Dick's 125,000th arrested landing.

CONSTELLATION (CVA-64)

Captain William D. Houser was awarded the Legion of Merit for his actions in the waters off North Vietnam while *Constellation* was assigned to the Seventh Fleet.

The medal was presented by Vice Admiral Allen M. Shinn, ComNav-AirPac, during a change-of-command ceremony aboard *Connie* in which Captain John M. Thomas relieved Captain Houser as skipper of the CVA. After the ceremony, Captain Houser was promoted to rear admiral.

HORNET (CVS-12)

Hornet and Rear Admiral H. L. Harty, Jr., ComASWGru Three, were host to ComFirstFlt when Vice Admiral Roeder boarded the CVS during Operation Snatch Block.

KEARSARGE (CVS-33)

Two Silver Stars, three Distinguished Flying Crosses, 12 Navy Commendation Medals and more than 200 Air Medals were among the awards presented to veterans



HELICOPTER from the stores ship Mars, a load of cargo hanging below it, prepares for flight to Coral Sea during a vertrep that won a commendation from her skipper.

of the Vietnam conflict aboard Kearsarge during a ceremony held at sea. Kay was en route home to Long Beach, Calif., after a WestPac deployment of seven months.

IWO JIMA (LPH-2)

Captain Francis X. Timmes is *Iwo Jima*'s new skipper. He relieved Captain Nils W. Boe during a brief ceremony.



HELPING hand is readily offered TV star Melody Patterson by two Connie crewmen.

KITTY HAWK (CVA-63)

U.S. Navy interdiction efforts against enemy watercraft got a boost from an unexpected source recently when a North Vietnamese surface-to-air missile (SAM) intended for a flight of two A-4 Sky-hawks from VA-112 aboard Kitty Hawk came down dead center on a North Vietnamese junk and demolished it. Lt. Jim Lucchesi, flight leader, said he saw the largest of a group of junks explode when the missile struck.

Two F-4 Phantom II pilots from Kitty Hawk shot down a pair of enemy aircraft after they "scrambled" off Kitty Hawk to intercept two unidentified planes that were spotted on Task Force 77 radar screens. After they identified the "bogies" as hostile, Lt. Denny Wisely, VF-114, and Lt. Dave McCrae, VF-213, got the aircraft with air-to-air missiles.

Ens. Dave Nichols and Ltjg. Dave Jordan were RIO's during the mission.

During a whirlwind, three-day tour of U.S. forces in the Vietnam area, former U.S. Senator Barry Goldwater flew aboard *Kitty Hawk* while the carrier was operating in the Gulf of Tonkin.

TICONDEROGA (CVA-14)

CVW-19 pilots from *Tico* were launched on strikes against North Vietnam as the carrier completed its 34th day on the line at Yankee Station. Flights of *Skyhawks* bombed the Dong Nac storage area and hit a storage and ammunition dump 30 miles southeast of Dong Hoi. Other *Skyhawks* struck a truck parking and storage area.

RANGER (CVA-61)

EM3 G. L. Sheets became the 200th man in 18 months to reenlist aboard *Ranger* when he was "shipped over" by his C.O., Captain W. E. Donnelly, recently.

The 18 months involved are significant because they mark the length of time a Naval Career Information Team (NavGit) has been assigned to Ranger by Bu-Pers. Before team members reported to the CVA, the retention rate was less than five percent. Within a year, that figure had risen to 30 percent—which translates to 100 shipovers.

Ranger's PO1's, through an Accent on Youth program they have initiated, have contributed \$1,190 to charitable organizations located all over the world.



MASS meeting between Enterprise and 20,-000 Hawaiians caused quite a crowd scene.



HIS RELIEF serves RAdm. William D. Houser a piece of cake after change of command.

YORKTOWN (CVS-10)

Flight testing of the tri-service XC-142A V/STOL aircraft continued as the plane made several landings aboard, and takeoffs from, Yorktown (NANEWS, July 1966, p. 20).

The aircraft began its first approach to the ASW carrier after a full-speed pass and several fly-by's. After a "touch-and-go," the plane made its first landing.

Yorktown's 117,000th arrestment was made by Commander John D. Shaw, VA-125's C.O., in an A-4E Skyhawk. Soon after, number 118,000 was made by Captain W. B. Muncie, skipper of VX-5, in an-

other A-4E.

ENTERPRISE (CVAN-65)

Shortly after her crewmen celebrated the fifth anniversary of her commissioning, the *Big E* rejoined the Seventh Fleet's "Yankee Station Team" for her second tour in the combat zone.

After serving as a "showboat" during a stopover in Hawaii (see cut), Enterprise steamed out the old year as she headed for where the action is.

The year 1967 may have been brand new, but North Vietnamese targets were getting the same old pasting from CVW-9 aircraft as they were being launched from *Enterprise*. Just a few examples:

Commander Robert E. Bennett, VA-113's skipper, led four A-4 Skyhawks on a rocket strike against camouflaged barges at Ha Tinh.

Also flying A-4's, pilots from VA-56 joined other VA-113 aircraft for missions against cargo-carrying vessels off the coast of North Vietnam.

Commander Art Barie, VA-35 C.O., led a strike by A-6 Intruders against the Thien Lihn Dong rail bridge. Other VA-56 Skyhawk pilots, led by LCdr. P. D. Stephenson, hit a group of motorized junks near Vinh.

And so it goes. The Seventh Fleet has its nuclear punch back.



FLAGSHIP for PhibRon Nine, Navy's newest LPH, Tripoli, has arrived in her new home port, San Diego, and has participated in operations off the coast of California.



SHIP'S PLAQUE IS PRESENTED TO BOB HOPE BY CAPT. RICHARD GRAFFY



RAPID-FIRE HUMOR STARTS SHOW

* 'LET THE SHOW BEGIN' *



PHYLLIS DILLER NAMED MISS V-2

When Comedian Bob Hope led a troupe of performers on the latest of his Christmas so-journs overseas to entertain U.S. servicemen, one stop was aboard USS Bennington, operating off Vietnam. The crew's reaction to his arrival was typified by a large sign Benn men displayed on the island. It read: "Let the show begin." And begin it did; a happy Bennington crew cheered and applauded Hope's humor and song.



MISS WORLD VISITS INJURED MAN



APPRECIATIVE AUDIENCE WATCHES KOREAN KITTENS



TROUPE MEMBERS JOIN IN FINALE OF THE PROGRAM

STEPS TO SOLVE ANTENNA PATTERN PROBLEM

A pilot leaves the ready room after a briefing for a training flight. He is scheduled to fly squadron plane #4. He gets old #4 running and calls the tower. The only answer he gets is the noise old #4 makes and other planes calling the tower. He decides that the trouble is "UHF/Tx out" and goes back to cancel the flight and write up the "gripe." A technician checks the transmitter output with a wattmeter, the antenna with a field strength meter, and the UHF receiver by calling base radio. Old #4 is back up again, ready to waste the time of another pilot and another technician.

The wasted time and effort is probably due to a poor UHF antenna pattern. Aircraft UHF antennas do not radiate the same amount of energy in all directions; some have very deep nulls which vary in depth and bearing as the frequency is changed. Intermittent complaints on IFF and Tacan equipment may be the result of the aircraft antenna patterns.

Being aware that a problem exists does not eliminate the problem, but it is prerequisite for finding the solution. Therefore, the Weapons Systems Test Division (WST) at Naval Air Test Center, Patuxent River, Md., measures the antenna patterns for all UHF, IFF, and Tacan antennas on all new aircraft and uses this information to accept



SUPPORT tower is used to position large models or full scale antennas for tests.

By Lt. Thomas D. Martin



ANTENNA with model on top is used for testing sonobuoys at NATC Patuxent.

or reject the aircraft antenna system. With knowledge of the radiation distribution, pilots and aircrewmen can predict the direction and the distance to which they can communicate. Since the patterns depend not only on the type of antenna but also upon its location on an airplane, the entire airplane must be considered a part of the antenna,

One method used to determine antenna patterns is to fly the aircraft over some known point at 24 different headings and measure the signal strength at a receiver site on the ground. These data, using the aircraft as origin, produce a plot of the pattern of the antenna under test for one aircraft attitude, one aircraft angle of bank, and one frequency. Plotting antenna patterns for three frequencies and three bank angles would require completing this procedure nine times.

The same results can be obtained faster by using models, scaled down by a certain factor, usually a tenth or a twentieth. The operating frequency is increased by the same amount.

The antenna range facilities at NATC consist of two antenna support towers, a stand for mounting a transmitting source and an automatic plotting recording console in a building.

The smaller antenna support tower is 20 feet high but has a weight limitation of 200 pounds, which restricts its use to the testing of model antenna systems. A large tower supported by a steel framework is also available and has a weight capability of 3,000 pounds. Both towers can either be rotated with the model stationary or remain stationary while the model is rotated. The model can be positioned at any angle with respect to the transmitting source.

WST uses both of these methods and is planning to inaugurate a third. The new method would use the existing computer-integrated range facility to process antenna patterns in real-time. Aircraft heading, bank angle, and attitude will be fed into the computer. Aircraft position will be provided by the radar phototheodolite range. Received signal strength will come from the existing equipment. The computer will take the data, correct it for range, and determine the antenna patterns in both horizontal and vertical planes around the airplane as it maneuvers in flight.

All equipments that depend on an antenna either to receive or transmit signals have some type of antenna problem. The development of antennas has not kept up with the development of other hardware, but the testing at NATC is an attempt to improve what is being delivered to the Fleet now.

SecDef Approves A-NEW Will be Installed in Orions

The A-NEW system (NANews, August 1963, p. 6) has been approved by the Secretary of Defense for installation in all *p-3 Orion* patrol aircraft delivered to the Navy after 1968. The integrated ASW avionics system utilizes modern digital computers in the command and decision-making process.

At Naval Air Development Center, Johnsville, Pa., the team which managed the P-3 Mod 3 A-NEW system is now starting to develop a similar one for the Navy's carrier-based ASW aircraft. This newest effort is under the direction of Commander D. R. Mayer, the center's A-NEW project manager.

MOUNTAIN WAVE



A MOUNTAIN WAVE IS A STATIONARY DISTURBANCE SOMETIMES FOUND IN THE WIND FIELD OVER MOUNTAINOUS TERRAIN. UNDER CERTAIN CONDITIONS MODERATE OR EVEN SEVERE TURBULENCE MAY OCCUR IN A MOUNTAIN WAVE.

THE MOUNTAIN WAVE FORMATION IS CONCENTRATED ON THE LEEWARD SIDE OF THE MOUNTAIN BARRIER. THE WAVE NOR-MALLY FORMS DURING PERIODS



MALLY FORMS
DURING PERIODS
OF STRONG WINDS
AND IN AN UNSTABLE ATMOSPHERE

THE MOUNTAIN WAVE IS BASICALLY A TROUGH OF LOW PRES-SURE. VERTICAL VELOC-ITIES OF 5-10 METERS PER SECOND (TEN TO TWENTY KNOTS) ARE COMMON IN WAVES OVER MODERATELY HIGH MOUNTAINS.



THE INTENSITY OF TURBULENCE IN THE WAVE IS DEPENDENT UPON: THE STEEPNESS OF THE MOUNTAIN, THE HEIGHT OF THE MOUNTAIN, THE WIND SPEED FLOWING UP AND ACROSS THE TOP OF THE MOUNTAIN, AND THE RELATIVE STABILITY OF THE AIR MASS INVOLVED.



A STUDY REPORTED IN A WORLD METEOROLOGIC-AL ORGANIZATION PUB-LICATION SUGGESTED THAT VERTICAL VELOCITIES UP TO 40 METERS PER SECOND (78 KNOTS) ARE THEORETICALLY POSSIBLE UNDER PROPLER ENVIRONMENTAL CONDITIONS. REDUCED AIR SPEED IS RECOMMENDED WHEN FLYING IN MOUNTAIN WAVE SITUATIONS EVEN WHEN THE AIR SEEMS SMOOTH. THE REASON IS THE AIRCRAFT COULD PASS ABRUPTLY INTO TURBULENTAIR AND NORMAL POWER MIGHT PLACE EXCESSIVE STRESS ON THE AIRFRAME.



One More Step Upward First NFO in VRF-32 Now a JC

The Ferry Command "lost" its NFO ensign when William R. Murray of VRF-32 donned his JG stripes in the office of the squadron skipper, Cdr. Roy T. Janiec. Until now this NAS NORTH ISLAND squadron claimed to have the only Naval Flight Officer ensign in the Navy assigned to a ferry squadron.

It all started a year earlier when the squadron, responding to the tempo of Fleet activities in the Far East, was faced with an increase in trans-Pacific ferry flights. To meet the need for trained navigation specialists, three naval flight officers were assigned to VRF-32. Murray, then an ensign fresh out of training at NAS CORPUS CHRISTI, was the first to arrive. He found himself faced with the necessity of transitioning fast from student to full-time navigator, but he managed the change with ease.

In addition to holding such deskbound positions as squadron special services officer, postal officer, forms control officer, athletics officer and assistant navigation officer, he has managed the "nav" table of every kind of plane that the squadron ferries overseas. In collecting the 1,100 hours now in his logbook, Ltjg. Murray has flown in P-2's, P-3's, C-47's, C-54's, C-117's, C-118's, C-121's and C-130's. At one time or another he has been responsible for navigating these aircraft all over the Pacific, and breaking out of that routine, he once navigated an HU-16 to the Caribbean island of Trinidad.



THE NAVAL Aviation Museum at Pensacola continues to grow. Vice Admiral Alexander S. Heyward, Jr., Chief of Naval Air Training, receives a model of the TC-45J for display. Presenting model are Beech Representatives Jay Sorenson and John Stewart.

New Buildings for Memphis Improved Technical Facilities

Two major construction projects at NAS MEMPHIS, an Aviation Electronics School building and a new dining hall, are scheduled to begin this year.

The Aviation Electronics School will consolidate into one building a program now occupying six 25-year-old "temporary" structures. Designed by the Memphis firm of Wiseman, Bland and Foster, the building follows a new architectural trend of windowless classrooms (less distraction for students) and complete climatic control. The two-story, steel-reinforced concrete slab structure will have 80 classrooms and laboratories with training facilities for 2,000.

The air-conditioned dining hall will have a seating capacity of 4,000. An automated baking machine, which will bake enough rolls and biscuits to feed NAS MEMPHIS' 15,000 Navy men and Marines each day, will require only

two men to operate it.

PERSONAL GLIMPSES

Editor's Corner

What Kind of Bone Are You? The U.S. Naval Air Turbine Test Station Newsletter credits the following to a V.A. hospital newspaper:

"In the anatomy of every organization there are four kinds of

bones:

"There are the wish bones—who spend all their time wishing someone else would do the work.

"There are the jaw bones—who do all the talking but very little

"There are the knuckle bones who knock everything that anyone tries to do.

"And there are the back bones who get under the load and do the work!"

COST REDUCTION PASTURES. Marine helicopter pilots at MCAS SANTA ANA, Calif., were close neighbors to a flock of 1,800 sheep for three weeks, a happening which reportedly caused "some consternation" among the fliers. The flock moved into a part of the helicopter compound which is still under cultivation and spent three weeks "cleaning up" an alfalfa field (see photo) early in December. "A most economical way to do it," the farmer in charge reported.

Walking to Work. Jet commercial travel has made life easier for the passenger. But how about the crew? According to Indian Aviation magazine, a test was conducted aboard one of Air India's 707's on a trip from London to New York. A pedometer was attached to one of the flight's air hostesses. She registered five and ¾ miles walking the aisles to serve passengers on the seven-hour flight. "If she was footsore at touchdown, we're not surprised," the writer said.

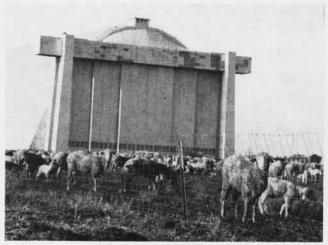
CHAPELLE MEMORIAL. A civilian dispensary near Chu Lai has been named the Dickey Chapelle Memorial Dispensary in honor of the American newspaperwoman who died in action with the Marine Corps in 1965. Long a favorite news hunter with the Marine Corps, Miss Chapelle had been on campaigns in World War II and Korea. She was on her second Vietnam tour when a booby-trap exploded among the Marines she was accom-panying. Funds for the 44-bed dispensary were made available through CARE and friends of the late correspondent. The Ninth Engineer Battalion, Marine Corps, constructed the building. A marble plaque was inscribed by Marines, "She was one of us and we will miss her."

Awards for the Best Everything. In the January 1967 Naval Aviation News (p. 33), a story appeared listing new awards for ASW excellence among the squadrons and ships assigned to ComASWGru

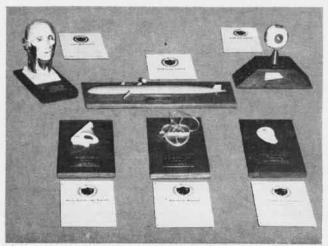
One, under Rear Admiral Evan P. Aurand. The photo below shows the actual trophies. From the top, left to right, are the Good Head Award, for the best headwork during the most recent sea operations; the Gold Screw Award, for an achievement that contributes to a submariner requesting new duty: the Eagle Eye Award, for the individual who spots a positive sub periscope or snorkel. Bottom row, from left, are the Nose That Knows Award, given for an initial contact made by radar, ECM or sniffer device; Big Heart Award, for a nice try or benevolent act; and the Golden Ear Award, for the individual who makes initial contact with a sub through sonar.

HAIRCUTS OR HAIR NETS. In the U.S. Navy Medical News Letter (September 24, 1966), article 1161.1b of U.S. Navy Uniform Regulations was quoted: "Hair shall be worn neatly and closely trimmed. The hair may be clipped at the edges of the sides and back, but must be so trimmed as to present an evenly graduated appearance, and shall not exceed three inches in length."

Reason for the quotation was the recent publication of an article in the British Medical Journal describing "a new type of industrial accident" which it said was "becoming manifest." Seems that the long hair worn by English youths (the article described it as "the present day Samson complex") has resulted in serious accidents when caught in industrial machinery. The article stated: "It is felt the legislation compelling women to wear hair nets be extended to men of hair length beyond a reasonable figure."



AT SANTA ANA, SHEEP 'CLEANED UP' ALFALFA FIELD



A SQUADRON OR SHIP HAS PLENTY OF CHANCES TO WIN

LETTERS

By the Numbers

Sirs: I note that you, Ling-Temco-Vought and others keep referring to the A-7A as the Corsair II. I suppose LTV can call its aircraft anything the company wants, but the following should be noted:

The O2U, O3U and SU series of Vought airplanes, which were with us from the late '20's through the '30's, were called Corsairs. Then in the '40's and early '50's, we had the F4U Corsairs.

Accordingly, should not the A-7A be referred to as the Corsair III?

R. K. AWTREY, CDR.

HQ USEUCOM (J-4) APO New York 09128

The introducing the A-7A's assigned name, Corsair II, the April 1965 issue of Naval Aviation News noted that the Vought Corsair tradition dated from the O2U's of the late '20's. Thus there has definitely been more than one Corsair model in Navy/Marine service before the A-7A. However, prior to WW II, those models of aircraft which were known by a name (for example, the Vought Corsair, Curtiss Hawk and Curtiss Helldiver) bore names given by the company building the aircraft. These names had no official Navy sanction. With WW II came officially assigned names, including Corsair for F4U's. As the next design after the F4U series to receive the Corsair name, the A-7A has become the Corsair II, this name being officially assigned by the Department of Defense.

It is interesting to note that the British Royal Navy used Corsair I through IV's, having assigned the different mark numbers to the various F4U variants they received under Lend-Lease. Fortunately time and circumstances should prevent any serious confusion resulting from the use of Corsair II for the U.S. Navy's newest Corsair.

New Airport Procedures Navy Acting on FAA Changes

A new handbook, containing standards for setting up or revising the instrument flight procedures pilots use to land at all U.S.-controlled civilian or military airports, has been published by the Federal Aviation Agency and the U.S. armed services.

Entitled the United States Standard for Terminal Instrument Procedures, the handbook replaces the U.S. Manual of Criteria for Standard Instrument Approach Proce-

Citing recent technological advances, the handbook will provide much more efficient use of both ground-based and airborne navigation equipment to meet the demands of increasing traffic volume. Airport planners will also gain greater flexibility in designing instrument flight procedures for the greater range in size, weight, speed and maneuverability of today's aircraft. In some instances, airports will be able to employ navigation aids they could not previously use.

The new procedures are applicable throughout the world, wherever the FAA or the U.S. armed forces exercise jurisdiction over flight procedures in terminal (airport) areas.

Although a target period of two years has been established for general conversion to the new procedures, the Flight Operations Division of the Office of the Chief of Naval Operations announced that the Navy should complete the changeover within a year after April 1967.

The handbook itself has been incorporated into the Navy directives system and has been assigned OpNav instruction number 3722.-16A. However, details concerning implementation of its new procedures will be spelled out in OPNAV Inst. 3722.4C, still being drafted.

Until the transition is made, earlier procedures may still be correctly employed, the OPNAV division pointed out. The Naval Oceanographic Office's Aeronautical Division will be in charge of training personnel in use of the new methods, and announcement of training schedules will be made by that organization. OPNAv Inst. 3722.4C will list actual transition dates,

NAVAL AVIATION FILMS

Among the latest motion picture films released by the Film Distribution Division, U.S. Naval Photographic Center, the following should prove of particular interest to personnel in Naval Aviation:

MH-9848 (unclassified) The Golden Challenge. Various stages of Marine pilot training, from college to squadron. Latest model aircraft and training methods. 16 minutes.

MN-10125 (unclassified) Parachute Release and Rescue. Improvements in survival equipment and techniques. Helicopter pickup of downed airman, canopy deflation pockets, torso lift ring and Kock releases, 16 minutes,

MN-10134A (unclassified) T-28 Standard Operating Procedures-Section Formation. Techniques and procedures for learning to fly in close proximity with other aircraft. 22 minutes.

MN-10134B (unclassified) T-28 Standard Operating Procedures-Section Cruise. Proper technique to maintain a constant nose to tail distance while flying number two position in a section formation without moving the throttle, 14 minutes,

MN-10134C (unclassified) T-28 Standard Operating Procedures-Division Formation. Basic techniques and procedures for flying in a four-plane division. 18 minutes.

Instructions for obtaining prints of newly released films are contained in OPNAV Instruction 1151.1D.



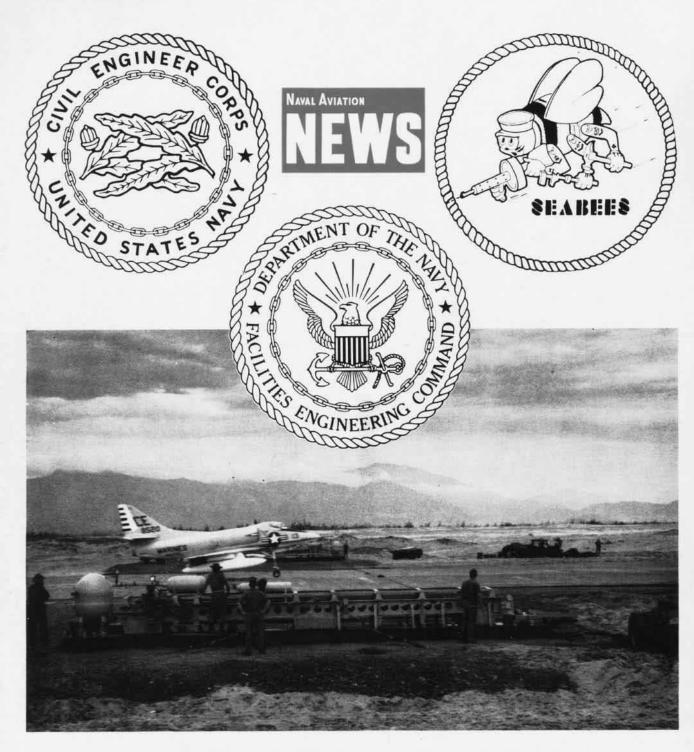
IN JANUARY at Coast Guard Air Station, Barber's Point, Rear Admiral G. D. Synon, Coast Guard Commander in the Pacific, dedicated the nation's first circular military barracks. The revolutionary design grew out of the noise problem at air stations. Flat, rectangular, precast concrete slabs, set at slight angles to each other, deflect sound waves coming from any direction. Construction costs are no more than for a conventional structure. The 150-man barracks has been named the Stone Memorial Barracks in memory of Cdr. Elmer F. Stone, one of the first Coast Guard officers designated a Naval Aviator (No. 38).



Training Squadron 23, one of six squadrons in the Advanced Jet Training Command, inhabits the 'Griffin's Lair' at NAAS Kingsville. Led by Commander Warren H. Lowans, the squadron trains aviators in the F9F. In the past 16 months, over 150 Naval Aviators have earned their 'Wings of Gold' at VT-23.







THREE ANNIVERSARIES



This year the Naval Facilities Engineering Command (formerly the Bureau of Yards and Docks) celebrates its 125th anniversary; this month the Naval Civil Engineer Corps observes its 100th year and the Seabees record their 25th birthday. These three are the team that gives Navy an engineering and construction capability in support of seapower.